Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108-4310

CONTRACT NO. N62473-10-D-0809
CTO No. 0007

FINAL

EXECUTION PLAN

January 20, 2011

DCN: RMAC-0809-0007-0005

PARCEL E, 500 SERIES AREA
RADIOLOGICAL REMEDIATION AND SUPPORT
HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA

DEPARTMENT OF THE NAVY
BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
1455 FRAZEE RD, SUITE 900
SAN DIEGO, CA 92108-4310

Ser BPMOW.cny/0220
JAN 20 2011

Mr. Mark Ripperda (SFD 8-1)
U.S. Environmental Protection Agency, Region IX
75 Hawthorne Street
San Francisco, CA 94105-3901

Mr. Larry Morgan
California Department of Public Health
1616 Capitol Avenue, MS 7402
P.O. Box 997377
Sacramento, CA 95899-7377

Dear Regulatory Team Members:

Enclosed please find the Final Execution Plan, Parcel E, 500 Series Area Radiological Remediation and Support, Hunters Point Shipyard, San Francisco, California. This site specific Execution Plan serves as the work plan for removing the sanitary sewer and storm drain system and performing radiological surveys of various buildings within the Parcel E 500 Series area. A Design Plan, providing detailed design drawings and technical specifications for each trench segment in Parcel E, will be submitted under separate cover. This document is provided for your records. No comments or further review are required on your part.

If you have any questions regarding the enclosed document, please contact Mr. Chris Yantos at (619) 532-0912, or Mr. Keith Forman at (619) 532-0913 at your earliest convenience.

Sincerely,

KEITH FORMAN
BRAC Environmental Coordinator
By direction of the Director

Enclosure: 1. Final Execution Plan, Parcel E, 500 Series, Radiological Remediation and Support, Hunters Point Shipyard, San Francisco, California, January 2011

Ser BPMOW.cny/0220
JAN 20 2011

Copy to:
Diane Silva (2 Hard Copies, 1 unbound, CD)
NAVFAC Southwest (Code EV33)
Naval Base San Diego
2965 Mole Rd., Bldg. 3519
San Diego, CA 92136

Laurie Lowman (3 Hard Copies and 3 CDs)
Building 1971
NWS P.O. Drawer 260
Yorktown, VA. 23691-0260

Amy Brownell (CD Only)
SF Department of Public Health
1390 Market St., Suite 210
San Francisco, Ca 94102

Elaine Warren (CD only)
Office of the City Attorney
City Hall, Room 234
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4682

Leslie Lundgren (Hard Copy and CD)
33 New Montgomery Street, Suite 2000
San Francisco, CA 94105

Dorinda Shipman (Hard Copy and CD)
Treadwell and Rollo
555 Montgomery St., Suite 1300
San Francisco, CA 94111

Stephen Proud (CD Only)
Lennar/BVHP
1 California St., Suite 2700
San Francisco, CA 94111

Stan DeSouza (CD Only)
1680 Mission St., First Floor
San Francisco, CA 94103-2414

Karla Brasaemle (Hard Copy and CD)
90 New Montgomery St., Suite 710
San Francisco, CA 94105

Ryan Miya (Hard Copy and CD)
Department of Toxic Substance Control
700 Heinz Avenue, Bldg. F, Suite 200
Berkeley, CA 94710

Michael Sharpless (CD Only)
Paul Hastings, et al.
55 2nd Street, 24th Floor
San Francisco, CA 94104-2635

Tamara Davidson (CD Only)
SF Health Department
101 Grove Street, Rm 217
San Francisco, CA 94102

Leon Muhammad (Hard Copy and CD)
5048 3rd Street
San Francisco, CA 94124

Linda Malvino (Hard Copy and CD)
Mactec Engineering and Consulting, Inc.
5341 Old Redwood Highway, Suite 300
Petaluma, CA 94954

Michael McGowan (CD only)
4634 3rd Street
San Francisco, CA 94124

Alex Lantsberg (CD Only)
991 Innes Avenue
San Francisco, CA 94124

Ser BPMOW.cny/0220
JAN 20 2011

Kristine Enea (CD Only)
951 Innes Avenue
San Francisco, CA 94124

Randy Brandt (CD Only)
475 14th Street, Suite 400
Oakland, CA 94612

Sarah Kloss (CD Only)
75 Hawthorne Street
San Francisco, CA 94105

Matt Hagemann (CD Only)
2503 Eastbluff Drive, Suite 206
Newport Beach, CA 92660

Anna E. Walden Library (Hard Copy and CD)
5075 Third Street
San Francisco, CA 94124

Janice Torbet (Hard Copy and CD)
100 Larkin Street
Gov. Information Ctr., 5th Floor
San Francisco, CA 94102

Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108-4310

CONTRACT NO. N62473-10-D-0809
CTO NO. 0007

FINAL

EXECUTION PLAN
January 20, 2011

PARCEL E, 500 SERIES AREA
RADIOLOGICAL REMEDIATION AND SUPPORT
HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA

DCN: RMAC-0809-0007-0005

Prepared by:

TETRA TECH EC, INC.
1230 Columbia Street, Suite 750
San Diego, California 92101-8536

Prepared by: _____
Shanti Montgomery
Technical Lead

Reviewed by: _____
Bill Dougherty
Project Manager

TABLE OF CONTENTS

TABLE OF CONTENTS
(Continued)

FIGURES

ATTACHMENTS

ABBREVIATIONS AND ACRONYMS

BRAC	Base Realignment and Closure
CSO	Caretaker Site Office
CTO	Contract Task Order
DON	Department of the Navy
FSS	Final Status Survey
HPS	Hunters Point Shipyard
IRP	Installation Restoration Program
MARSSIM	Multi-Agency Radiation Survey and Site Investigation Manual
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
PjM	Project Manager
RACR	Removal Action Completion Report
RASO	Radiological Affairs Support Office
RMA	radioactive material area
ROICC	Resident Officer in Charge of Construction
RPM	Remedial Project Manager
RRO	radiological remedial objective
RSO	Radiation Safety Officer
SFRA	San Francisco Redevelopment Agency
SUPR	Survey Unit Project Report
Triple A	Triple A Machine Shop, Inc.
TSP	Task-specific Plan
TtEC	Tetra Tech EC, Inc.
WA	Work Area

This page intentionally left blank.

1.0 INTRODUCTION

The Department of the Navy (DON) contracted with Tetra Tech EC, Inc. (TtEC) to perform a removal action in accordance with the final Base-wide Radiological Removal Action, Action Memorandum – Revision 2006 (DON 2006). This removal action consists of sanitary sewer and storm drain removal, along with radiological scanning and remediation of excavations and various buildings and sites within the Parcel E, 500 Series Area at Hunter Point Shipyard (HPS), San Francisco, California (Figure 1-1). These activities will take place within Parcel E Work Area (WA)-36 under Contract No. N62473-10-D-0809, Contract Task Order (CTO) No. 0007.

To perform this work, the following existing plans will be used in conjunction with the site-specific information provided in this Execution Plan:

- **Base-wide Radiological Work Plan**: Final Base-wide Radiological Work Plan, Revision 1, dated October 5, 2007 (TtEC 2007) (or most current revision)
- **Base-wide Storm Drain and Sanitary Sewer Removal Work Plan**: Final Base-wide Storm Drain and Sanitary Sewer Removal Work Plan, Revision 4 (includes Waste Management Plan [Section 8.0]) dated July 30, 2010 (TtEC 2010a) (or most current revision)
- **Health and Safety Plan**: Final Accident Prevention Plan/Site Safety and Health Plan, Parcel E, 500 Series Area, Hunters Point Shipyard, dated December 29, 2010 (TtEC 2010b)
- **Parcel E, 500 Series Area Design Plan**: Design Plan Parcel E, 500 Series Area, Hunters Point Shipyard, in progress (TtEC 2011a)
- **Basewide Radiological Support Sampling and Analysis Plan** for sample analysis: Final Execution Plan, Basewide Radiological Support, Attachment 1, dated January 2011 (TtEC 2011b)

This Execution Plan provides site-specific information not included in the above-referenced plans. The site-specific information addresses:

- Integration of surface drainage from Parcel E to the existing stormwater outfalls
- Dust control and air monitoring requirements specific to these work locations
- Traffic control measures for diverting traffic and maintaining access for site tenants and other DON contractors during construction within Parcel E, 500 Series Area

The following four additional documents have been developed and are presented as attachments to this Execution Plan:

- Project Contractor Quality Control Plan (Attachment 1)
- Radiation Protection Plan (Attachment 2)
- Basewide Dust Control Plan, Revision 1 (Attachment 3)
- Stormwater Pollution Prevention Plan (Attachment 4)

1.1 SITE HISTORY

HPS is located in the southeastern part of San Francisco on a long promontory that extends east into San Francisco Bay. Presently, HPS encompasses approximately 866 acres, including approximately 420 acres on land. The land portion of HPS was purchased by the DON in 1939 and leased to Bethlehem Steel Corporation. At the start of World War II in 1941, the DON took possession of the property and operated it as a shipbuilding, repair, and maintenance facility until 1974 when the DON deactivated HPS. From 1976 to 1986, the DON leased HPS to Triple A Machine Shop, Inc. (Triple A), a private ship repair company. In 1986, Triple A ceased operations and the DON resumed occupancy through 1989. In 1991, HPS was placed on the DON's Base Realignment and Closure (BRAC) list, and its mission as a DON shipyard ended in April 1994.

A 1998 BRAC decision requires full closure and cleanup of HPS. Essentially, this may entail removal of buildings and structures, including subsurface systems, as well as removal of contaminated materials. HPS was divided into 11 parcels, A, B, C, D-1, D-2, E, E-2, F, G, UC1, and UC2. Parcel A, consisting of the most inland 75 acres, was transferred to the San Francisco Redevelopment Agency (SFRA) in 2004. The remainder of HPS will be conveyed to the SFRA once the environmental cleanup is complete.

1.2 REGULATORY FRAMEWORK

Environmental investigation and remediation activities are being conducted at HPS under the Department of Defense Installation Restoration Program (IRP) in accordance with Comprehensive Environmental Response, Compensation, and Liability Act and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Under Executive Order 12580, the DON is the lead agency responsible for implementation of the IRP and the removal action. The U.S. Environmental Protection Agency is the lead regulatory agency, while the California Department of Toxic Substances Control and Regional Water Quality Control Board San Francisco Bay Region will provide state regulatory oversight.

1.3 REMOVAL ACTION OBJECTIVES

Consistent with the NCP requirements in Title 40 *Code of Federal Regulations*, Part 300.415(b)(2), the removal action objectives for this removal action are to implement the Action Memorandum (DON 2006) and protect public health and welfare and the environment by physically removing

and disposing of radioactive contamination that exceeds the radiological remedial objectives (RROs) listed in Table 1 of the Action Memorandum (DON 2006).

1.4 PROJECT POINTS OF CONTACT

Figure 1-2 presents the key individuals who are responsible for the oversight and/or implementation of the site activities.

1.5 PLAN ORGANIZATION

This Execution Plan is organized as follows:

- **Section 1.0** provides the introduction, site history and current operations, regulatory framework, RROs, project points of contact, and report organization.
- **Section 2.0** describes the work implementation for radiologically impacted buildings and area surveys and for the sanitary sewer and storm drain removal work.
- **Section 3.0** describes stormwater integration, stormwater pollution prevention measures, site-specific requirements for dust control during implementation of the site work, and spill/release prevention, response, and reporting.
- **Section 4.0** provides traffic control measures for diverting traffic and details alternate access routes for site tenants and contractors during construction.
- **Section 5.0** presents details for project reporting.
- **Section 6.0** lists the references cited in the text.
- **Figures** are included after the text.
- **Attachment 1** presents the Project Contractor Quality Control Plan. This plan establishes specific procedures and methods for field inspections, and provides an effective quality control system to ensure the quality of all work performed by TtEC and its subcontractor personnel during the implementation of the Parcel E, 500 Series Area fieldwork.
- **Attachment 2** presents the Radiation Protection Plan. This previously approved plan will be used for performing work under this CTO. This plan identifies the day-to-day management of radiologically impacted sites, remediation, surveys, training requirements, health and safety concerns, and material handling requirements for this project.
- **Attachment 3** presents the Basewide Dust Control Plan, Revision 1. This plan was updated to address multiple contractors working at HPS. This plan identifies the steps to be taken to reduce fugitive dust emissions during excavation, transportation of soil and debris, and installation/removal of construction site infrastructure.
- **Attachment 4** presents the Stormwater Pollution Prevention Plan. This plan was prepared to ensure construction activities comply with the substantive requirements of the National Pollutant Discharge Elimination System program, specifically the General Construction Activity Stormwater Permit program as set forth by the

California Regional Water Quality Control Board General Permit No. CAS000002, "Water Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities." This plan provides details for implementing best management practices during field activities.

2.0 WORK IMPLEMENTATION

The following sections discuss the guidance documents and procedures for performing the radiological release of radiologically impacted buildings and sites, and for the sanitary sewer and storm drain removal.

2.1 RADIOLOGICAL BUILDING AND SITE SURVEYS

The Base-wide Radiological Work Plan (TtEC 2007) describes survey and decontamination approaches that will be implemented in support of the radiological release of buildings and sites within Parcel E, 500 Series Area at HPS. Under this CTO, the procedures outlined in the Base-wide Radiological Work Plan will be followed to conduct Final Status Surveys (FSSs). The FSSs will be conducted at the following locations:

- Building 500
- 500 Series Building Site
- Building 521 Site (Power Plant)
- Building 520 Site
- Building 508 Site
- Building 506 Site
- Building 517 Site
- Building 510A Site
- Building 507 Site
- Building 509 Site
- Building 510 Site
- Building 503 Site
- Building 529 Site (vault demolition)

Task-specific Plans (TSPs) will be developed for each of these buildings/sites, and survey activities will be conducted in accordance with the guidelines in the Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) (NUREG-1575; DoD et al. 2000) and Action Memorandum (DON 2006). Each TSP will identify the specific radionuclides of concern that will be analyzed during the survey and evaluated against the RROs in Table 1 of the Action Memorandum (DON 2006).

To assist in the development of the TSPs, miscellaneous debris and thick vegetation will be removed from the 500 Series Area. This material will be removed from the site except at former Buildings 506, 520, and 529 and former Shacks 79 and 80, where known surface contamination

is present. Prior to any clearing activities, one radioactive material area (RMA) will be established as shown on Figure 2-1. These five former structure areas will remain an RMA until the respective TSPs have been finalized, at which time the survey and remediation activities specified in the TSPs will be followed. The Radiological Control Technicians will delineate the extent of the RMA around these five former structures by performing a walkover survey scan following the procedures specified in the Base-wide Radiological Work Plan, Revision 1 (TtEC 2007) and HPS Standard Operating Procedures. Debris will also be surveyed prior to removal from the site.

Survey activities as well as activities not addressed by MARSSIM will be performed in accordance with this plan, the TSPs, and the Standard Operating Procedures presented in the current revision of the HPS Radiation Protection Plan (Attachment 2). An FSS report will be generated for each impacted building and site. Information on any excavated piping located within an impacted building will be presented in a separate Survey Unit Project Report (SUPR).

2.2 SANITARY SEWER AND STORM DRAIN REMOVAL

The removal of sanitary sewers and storm drains will be conducted in accordance with the existing Base-wide Storm Drain and Sanitary Sewer Removal Work Plan (TtEC 2010a). This Execution Plan, in conjunction with the Design Plan (TtEC 2011a), provides project-specific details pertaining to the removal of sanitary sewer and storm drain lines within WA-36. The Base-wide Storm Drain and Sanitary Sewer Removal Work Plan provides procedures for performing the radiological surveys of the trench units and removed materials.

The Design Plan (TtEC 2011a) identifies the sanitary sewer lines, storm drain lines, and manholes to be removed and provides construction procedures to conduct these work activities. The general approach will be to remove the overlying pavement, excavate the soil overlying the sanitary sewer and storm drain lines, and subsequently remove the sanitary sewer and storm drain lines. A minimum of 1 foot of soil will be excavated around and below the pipe. Radiological screening and sampling will be performed ex situ on the pipe. Open storm drain or sanitary sewer lines left in place during the removal process will be plugged to prevent water from entering or exiting pipes. FSSs will be performed on the exposed, excavated trench surfaces. After the results of these activities are evaluated, any identified radiological contamination is removed, and concurrence is received from the Radiological Affairs Support Office, the trenches will be backfilled and the site restored.

Throughout the excavation process, soil and piping will be visually inspected for staining or odors. Material that emits odors or is stained will be segregated for further sampling and analysis in accordance with the Base-wide Storm Drain and Sanitary Sewer Removal Work Plan (TtEC 2010a).

3.0 ENVIRONMENTAL PROTECTION PLAN

The following sections discuss stormwater pollution prevention measures and site-specific requirements for dust control during implementation of the site work. A separate Stormwater Pollution Prevention Plan (Attachment 4) provides details for implementing Best Management Practices during field activities. Spill or release prevention, response, and reporting are also discussed.

3.1 REVISED STORMWATER CONTROLS

The purpose of this section is to present the overall approach on how TtEC will manage stormwater drainage within the Parcel E, 500 Series Area.

For WA-36, surface stormwater will be directed to existing storm drain lines, bay outfalls, or storm drain swales to the maximum extent practicable. If required, swales will be installed, as needed, to direct stormwater to existing swales and outfalls. The swales will be designed to handle a 2-year return period storm through the WA. As a result of multiple contractors working at HPS, stormwater design requirements are presented in the Design Plan (TtEC 2011a). The postconstruction field conditions will be evaluated prior to constructing swales. If it is determined that the proposed approach will not meet the design requirements, alterations will be made.

Because of multiple contractors working at HPS and the drainage requirements of the existing HPS tenants, coordination with the other contractors, HPS tenants, the Caretaker Site Office (CSO), and the Resident Officer in Charge of Construction (ROICC) will be required.

3.2 DUST CONTROL PLAN

Work activities will follow procedures and controls set forth in the Basewide Dust Control Plan (Attachment 3). This section identifies site-specific requirements not presented in the Basewide Dust Control Plan.

3.2.1 Track-out Prevention

Tracking out of loose materials will be controlled by use of tire-cleaning rumble grid plates at established access points from project sites to the paved road. The current track-out prevention control point is located on Lockwood Street exiting Parcel C (shown on Figure 3-1). Once the sanitary sewer and storm drain removal activities are completed at the intersection of Spear Avenue and I Street, a second tire-cleaning rumble grid plate is scheduled to be installed (under another contract) to allow truck traffic to leave Parcel E and HPS via Spear Avenue.

To ensure that the tires are free from mud or loose soils prior to leaving the site, bulk loaded trucks and commercial vehicles will be required to pass over a gravel pad (at least 50 consecutive feet in length from the intersection with the paved public road) and over the rumble grid plates where the soil residue from the tires will be removed.

Because the project location is not at the boundaries of HPS and is not accessible by paved public roads, any visible track-out material where vehicles exit the work site onto an HPS paved road will be removed by wet sweeping at the end of the work day or at least once per day.

3.2.2 Air Monitoring

Air monitoring will be conducted during construction activities, as detailed in the Basewide Dust Control Plan (Attachment 3). Three types of air monitoring to be conducted are:

- Upwind and downwind air quality monitoring
- Radionuclides of concern air monitoring
- Personnel monitoring (as needed)

During prolonged precipitation events (greater than 8 hours of precipitation in a 24-hour period), the air monitoring units will not be operated. If an air monitoring station or individual units are inoperable, construction activities will still continue at the associated work site.

Figure 3-1 shows the air monitoring locations.

3.3 SPILL/RELEASE PREVENTION, RESPONSE, AND REPORTING

3.3.1 Spill/Release Prevention

The primary activities that may result in a spill or release include vehicle fueling and management of decontamination waste. Spill/release prevention practices for these activities are as follows:

- **Fueling** – All vehicles will be fueled and serviced prior to moving onto the site. Any on-site fueling of vehicles will be conducted within a designated and controlled area. Bulk quantities of fuel, exceeding 1,320 gallons, will not be stored on-site. Absorbent pads or drip pans will be placed on the ground at the fueling point to catch any spills. Fueling operations will be attended and observed at all times. No latch-on fueling will be performed.
- **Wastewater** – Wastewater will be stored in double-walled temporary tanks or 55-gallon drums within a secondary containment area. Therefore, any spills from the containers or tanks will be contained and will not be released into the surrounding areas.

3.3.2 Spill/Release Response

In the event of a release of hazardous material into the environment, per the Health and Safety Plan (TtEC 2010b) TtEC will contain or control the release or evacuate the area if the spill is significant or represents an immediate health threat. Spills, leaks, and fires at HPS must be reported to the Remedial Project Manager (RPM) and CSO. In addition, all spills involving radioactive material must be reported to the Radiation Safety Officer (RSO) and the Radiological Affairs Support Office (RASO). Absorbent pads, shovels, and 55-gallon drums will be kept on-site to address the possibility of spills.

Spill cleanup materials and waste will be containerized, managed, and disposed of as described in the Waste Management Plan (TtEC 2010a).

3.3.3 Spill/Release Reporting

The steps below outline the chain of communications that will be followed if a significant spill of any hazardous substance occurs. Any spill over the reportable quantity as determined by federal and/or state regulations will be considered a significant spill, as will any spill below the reportable quantity not properly contained and released into the environment.

1. Site personnel involved in the spill will immediately contact the Project Superintendent, who will notify the Project Manager (PjM), Project Environmental Safety Manager, and RSO (if radioactive material is involved). The TtEC Project Superintendent or PjM will contact the RPM and CSO. The RSO will contact the RASO.
2. If a release of a waste or hazardous substance, regardless of quantity, could threaten human health or the environment outside the facility, the PjM will verify that the National Response Center (800-424-8802) and the local Fire Department have been notified by the DON. Releases will be reported and written follow-up emergency notices will be submitted under the Superfund Amendments and Reauthorization Act, Title II requirements.
3. Any release of fuels or other products that causes a sheen on water at the site or any release into the surrounding waters of San Francisco Bay must be reported to the DON immediately, who will then contact the National Response Center.

This page intentionally left blank.

4.0 TRAFFIC CONTROL PLAN

This section describes alternate traffic routes for site tenants and contractors during remedial activities and details traffic control measures to minimize impacts on normal traffic flow.

4.1 REVISED SITE TRAFFIC ROUTES

To ensure that the traffic flow across the Parcel E, 500 Series Area is maintained while removing the sanitary sewer and storm drain lines, the work will be conducted in phases. Because multiple contractors are working at HPS with some requiring access to the three Radiological Screening Yards (RSYs-2, -3, and -4), traffic routes will be determined in the field in consultation with the affected contractors, HPS tenants, San Francisco Police Department Crime Lab, CSO, and ROICC.

In general, since the only access to RSY-3 is through Mahan Street, the removal of the sanitary sewer and storm drain lines along the eastern Parcel E, 500 Series Area boundary will receive priority. Once Mahan Street is reopened, either the southern boundary (consisting of J and I Streets) or the northern Hussey Street boundary will follow. Because the closure of the western Parcel E, 500 Series Area boundary is the most disruptive for access to the San Francisco Police Department Crime Lab in Building 606, 3rd Street will be the last road closed for sanitary sewer and storm drain line removals.

To expedite the passage of facility traffic through or around the WA, TtEC will install and maintain necessary signs, temporary railings, barricades, and other means to safely direct traffic.

4.2 TRAFFIC CONTROLS

Appropriate on-site traffic control measures will be selected in the field based on actual field conditions. Traffic controls will provide for efficient performance of the work in a safe environment while minimizing the impact on normal traffic flow. Traffic controls will be required during construction activities to provide safe working conditions for equipment operations and truck loading for on-site and off-site transportation. Traffic controls may include, but are not limited to, the following:

- The loading and transporting of waste and debris will be scheduled to minimize disruptions to facility traffic.
- Transportation management strategies such as carpool/vanpool for construction workers will be encouraged.
- Transport trucks removing waste and debris from site areas will adhere to schedules to avoid backups along major streets. Close coordination between TtEC and the truck dispatcher will be maintained at all times during loading and unloading activities.

- An area sufficient to park passenger vehicles on-site in the support areas and to park haul trucks in the exclusion zones will be provided.
- Cones, flags, signs, and other traffic control measures will be used as needed to facilitate loading and unloading.
- To facilitate safe traffic patterns, trench plates may be used, when necessary, over open excavations.

These safety and control measures shall conform to the applicable specifications of the Manual of Traffic Controls for Construction and Maintenance Work Zones (California Department of Transportation 1996).

Materials and equipment will not be stored where they might interfere with the free and safe passage of personnel and tenants. At the end of each day's work and at other times when construction operations are suspended for any reason, TtEC will remove equipment and other obstructions from the portion of the roadway used by traffic. In addition, TtEC will adhere to all speed limit requirements.

5.0 REPORTING

Over the course of this project, three types of reports will be drafted: SUPRs, FSS Reports, and the Removal Action Completion Report (RACR). Each of these report types is described in this section.

5.1 SURVEY UNIT PROJECT REPORTS

For each survey unit excavated, surveyed, and sampled during the removal of the sanitary sewer and/or storm drains, a SUPR will be drafted. SUPRs will be based on the SUPRs Abstract (TtEC 2010c). Per the SUPRs Abstract, each SUPR will cover the following:

- Summary of survey unit activities
- Sampling approach for the survey unit
- Sampling methods used
- Data assessment
- Data evaluation
- Dose modeling
- Recommendation for unrestricted release

5.2 FINAL STATUS SURVEY REPORTS

In support of site closure and unrestricted free release, FSS Reports will be completed for each building and site that is surveyed and found to meet the RROs for unrestricted free release. Under this CTO, the following building and sites will be surveyed:

- Building 500
- 500 Series Building Site
- Building 521 Site (Power Plant)
- Building 520 Site
- Building 508 Site
- Building 506 Site
- Building 517 Site
- Building 510A Site
- Building 507 Site
- Building 509 Site

- Building 510 Site
- Building 503 Site
- Building 529 Site (vault demolition)

Sanitary sewer and/or storm drain line removal activities within buildings will be documented in SUPRs and not included in the building FSS Reports.

Similar to the SUPRs, the FSS Reports will include the following:

- Summary of building/site activities
- Sampling approach for the site
- Sampling methods used
- Data assessment
- Data evaluation
- Dose modeling
- Recommendation for unrestricted release

5.3 REMOVAL ACTION COMPLETION REPORT

Once the SUPRs and the FSS Reports are finalized, a RACR will be drafted. This report will:

- Summarize the findings of the SUPRs and FSS Reports
- Characterize the nature and extent of any contamination encountered
- Present a conceptual site model
- Provide a summary of any remaining risks following remediation
- Discuss the "As Low As Reasonably Achievable" analysis
- Support clean closure and free release for the work area

6.0 REFERENCES

California Department of Transportation. 1996. State of California Manual of Traffic Controls for Construction and Maintenance Work Zones.

DoD (Department of Defense), Department of Energy, Nuclear Regulatory Commission, and U.S. Environmental Protection Agency. 2000. Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM), NUREG-1575, Revision 1. August.

DON (Department of the Navy). 2006. Final Base-wide Radiological Removal Action, Action Memorandum – Revision 2006, Hunters Point Shipyard, San Francisco, California.

TtEC (Tetra Tech EC, Inc.). 2007. Final Base-wide Radiological Work Plan, Revision 1, Hunters Point Shipyard, San Francisco, California. October 5 (or most current revision).

————. 2010a. Final Base-wide Storm Drain and Sanitary Sewer Removal Work Plan, Revision 4, Hunters Point Shipyard, San Francisco, California. July 30 (or most current revision).

————. 2010b. Final Accident Prevention Plan/Site Safety and Health Plan, Parcel E, 500 Series Area, Sanitary Sewer and Storm Drain Removal, Hunters Point Shipyard, San Francisco, California. December 29.

————. 2010c. Final Survey Unit Project Reports Abstract, Revision 2, Hunters Point Shipyard, San Francisco, California. January 27.

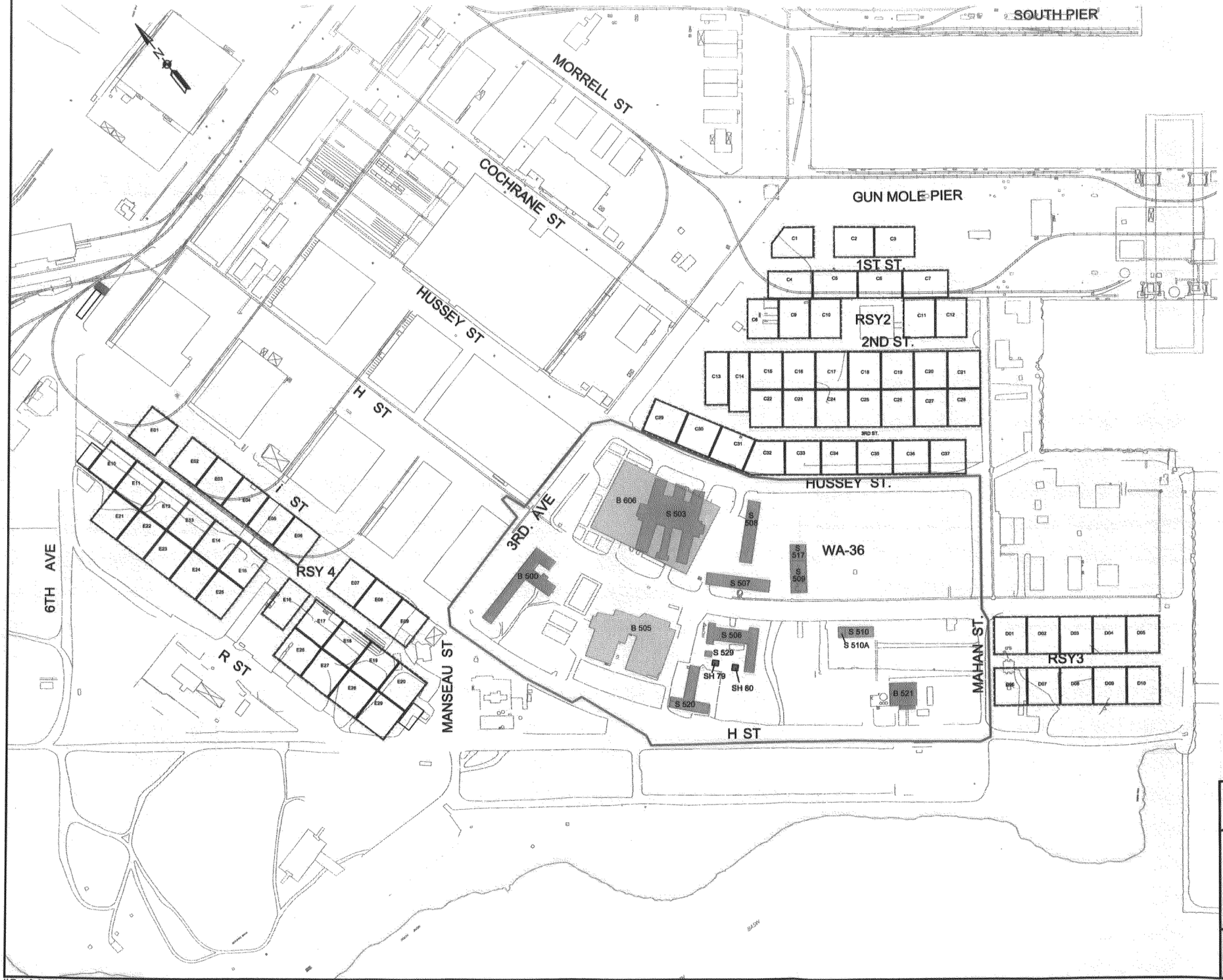
————. 2011a. Design Plan, Parcel E, 500 Series Area Sanitary Sewer and Storm Drain Removal, Hunters Point Shipyard, San Francisco, California. In progress.

————. 2011b. Final Execution Plan, Basewide Radiological Support, Hunters Point Shipyard, San Francisco, California. January.

This page intentionally left blank.

FIGURES

This page intentionally left blank.



NOTES:

RSY – WORK AREA
WA – WORK AREA

LEGEND

WORK AREA 36 BOUNDARY

B- NON-IMPACTED BUILDINGS

B- IMPACTED BUILDINGS

S- IMPACTED BUILDING SITES

SH- IMPACTED SHACK SITES

C01 RSY 2, 3 AND 4 SCREENING PADS

150 0 150 300
(feet)

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

EXECUTION PLAN - PARCEL E, 500 SERIES AREA
RADIOLOGICAL REMEDIATION AND SUPPORT

FIGURE 1-1

WORK AREA LOCATION MAP

HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

REVISION:
AUTHOR: A. CRABTREE
PROJECT NO:
FILE: SEE BELOW

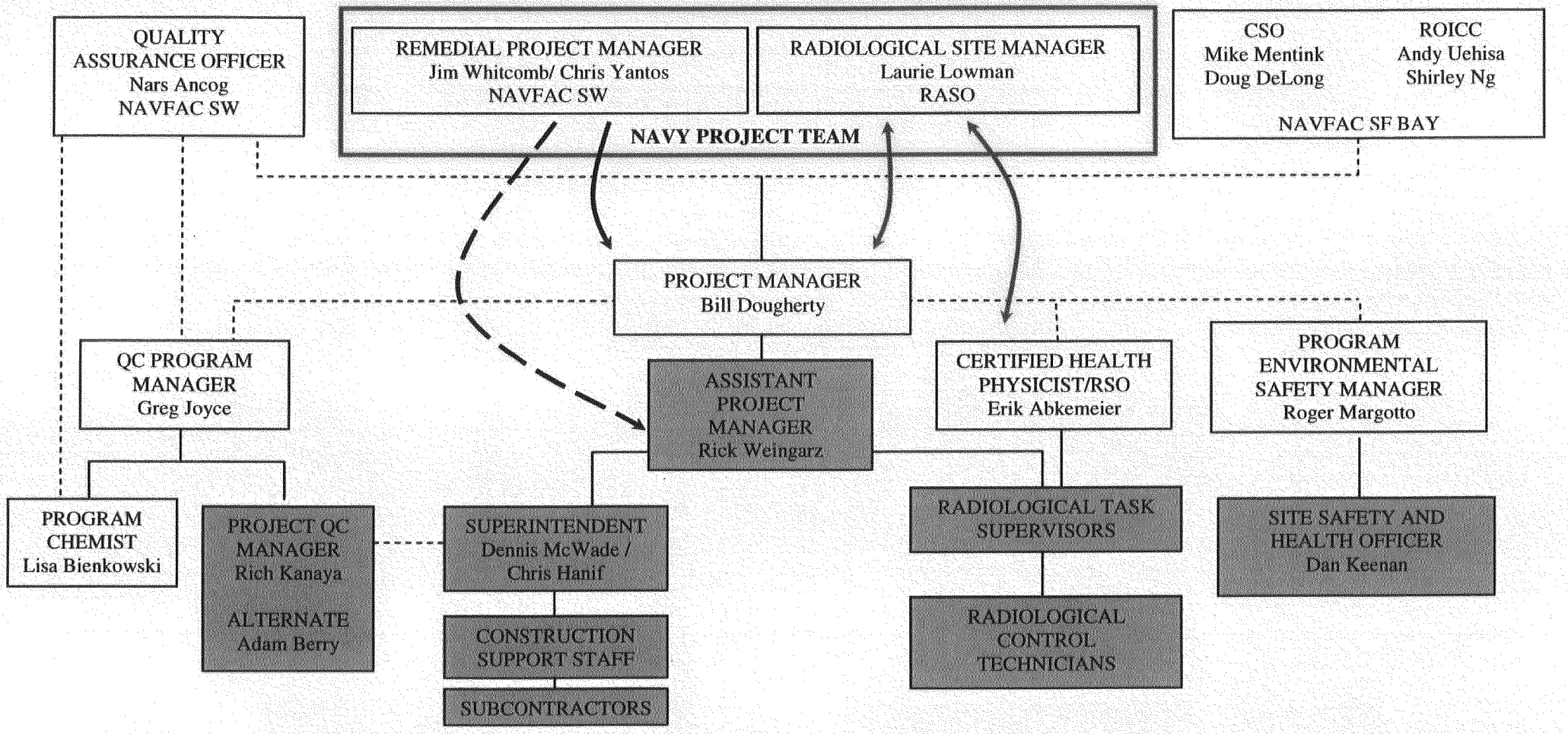
TETRA TECH EC, INC.

\\Ecisfofile1\projects\CTO-07 CAD Files (Rad EMAC)\DWG Files\Execution Plans\CTO-07_Fig 1-1.dwg

11/18/10

FIGURE 1-2

PROJECT ORGANIZATION CHART



Legend

- Formal reporting relationship
- Supporting relationship
- Primary lines of technical communication
- Line of technical direction (alternate where dashed)

Abbreviations and Acronyms:
CSO – Caretaker Site Office
HPS – Hunters Point Shipyard
NAVFAC SW – Naval Facilities Engineering Command Southwest
QC – Quality Control
RASO – Radiological Affairs Support Office
ROICC – Resident Officer in Charge of Construction
RSO – Radiation Safety Officer
SF – San Francisco

Staff in shaded boxes are on-site at HPS and responsible for field implementation of activities under the Work Plan.

The Construction Manager (Jeff Bray) has overall responsibility for coordinating the activities of on-site technical staff.

HUSSEY ST

3RD AVE

MANSEAU ST

MAHAN ST.

H ST

2ND ST.

3RD ST.

HUSSEY ST.

RSY2

WA-36

C8 C9 C10 C11 C12

C13 C14 C15 C16 C17 C18 C19 C20 C21

C22 C23 C24 C25 C26 C27 C28

C29 C30 C31 C32 C33 C34 C35 C36 C37

B 606 S 503

S 508

S 517

S 509

S 507

B 500

B 505

S 506

S 529

SH 79

SH 80

S 520

S 510

S 510A

B 521

E09

E20

D01 D02

D06 D07

NOTES:

RSY – RADIOLOGICAL SCREENING YARD
WA – WORK AREA

LEGEND

WORK AREA BOUNDARY (WA–36)

RADIOACTIVE MATERIAL AREA

STORM DRAIN LINE

B- NON–IMPACTED BUILDINGS

B- IMPACTED BUILDINGS

S- IMPACTED BUILDING SITES

SH- IMPACTED SHACK SITES

C01 RSY 2, 3 AND 4 SCREENING PADS

80 0 80 160

(feet)

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

EXECUTION PLAN - PARCEL E, 500 SERIES AREA
RADIOLOGICAL REMEDIATION AND SUPPORT

FIGURE 2-1

RADIOACTIVE MATERIAL AREA

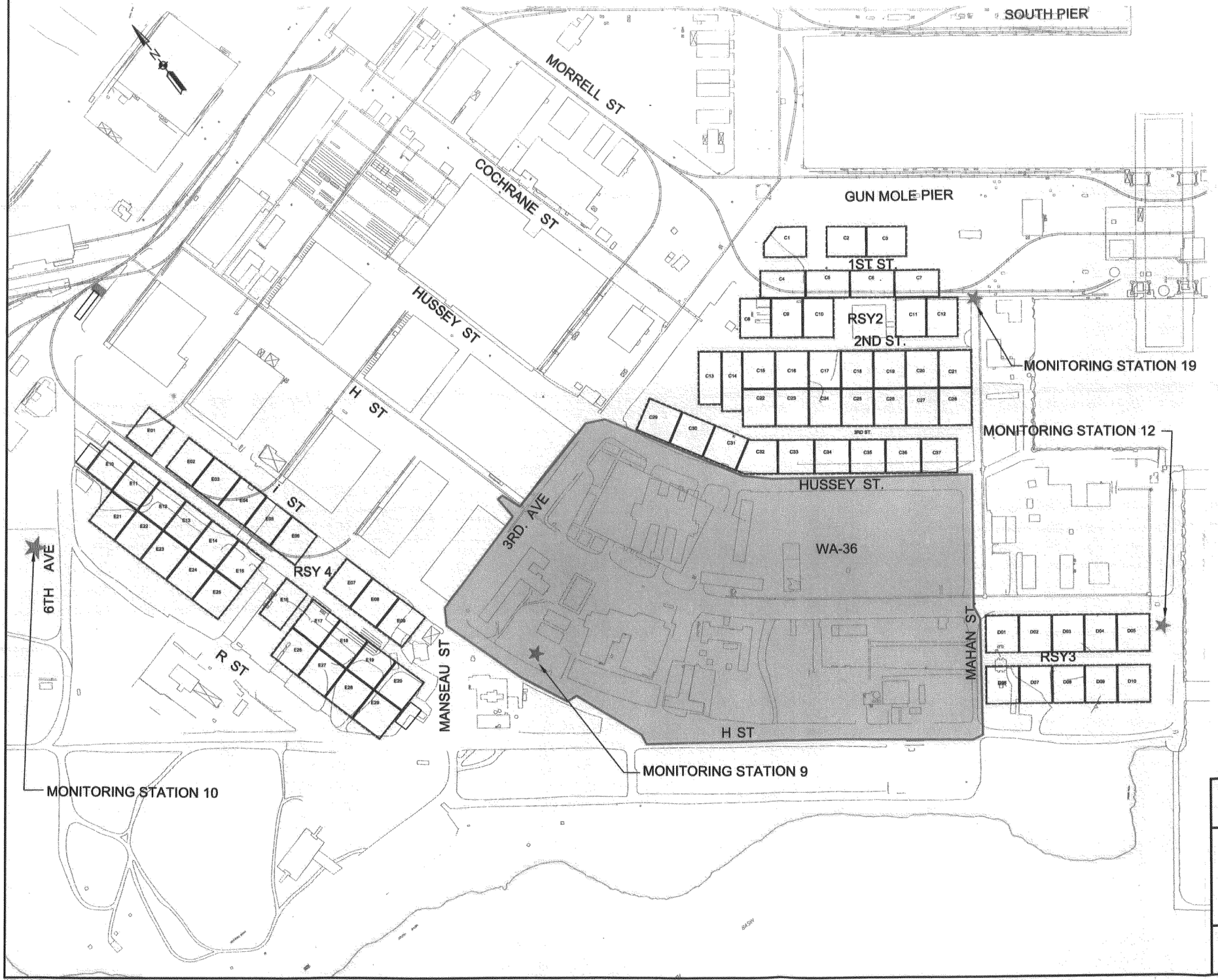
HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

REVISION:
AUTHOR: A. CRABTREE
PROJECT NO:
FILE: SEE BELOW

TETRA TECH EC, INC.

\\Ecisfofile1\projects\CTO-07 CAD Files (Rad EMAC)\DWG Files\Execution Plans\CTO-07_Fig 2-1.dwg

11/18/10



LEGEND

- WORK AREA BOUNDARY (WA–36)
- LOCATION OF 10' X 16' RUMBLE STRIP
- LOCATION OF 10' X 50' GRAVEL CLEAN–OUT PAD
- AIR MONITORING LOCATION (PM10, ASBESTOS, MN, PB, TSP)
- AREA OF CURRENT EXCAVATION AND SURVEY WORK

NOTES:

MN – MANGANESE
PB – LEAD
PM10 – PARTICULATE MATTER SMALLER THAN 10 MICRONS IN DIAMETER
RSY – RADIOLOGICAL SCREENING YARD
TSP – TOTAL SUSPENDED PARTICULATES
WA – WORK AREA

150 0 150 300
(feet)

BASE REALIGNMENT AND CLOSURE
PROGRAM MANAGEMENT OFFICE WEST
SAN DIEGO, CALIFORNIA

EXECUTION PLAN - PARCEL E, 500 SERIES AREA
RADIOLOGICAL REMEDIATION AND SUPPORT

FIGURE 3-1

DUST CONTROL TRACK-OUT POINTS
AND AIR MONITORING LOCATIONS

HUNTERS POINT SHIPYARD, SAN FRANCISCO, CA

REVISION:
AUTHOR: A. CRABTREE
PROJECT NO:
FILE: SEE BELOW

TETRA TECH EC, INC.

\\Ecisfofile1\projects\CTO-07 CAD Files (Rad EMAC)\DWG Files\Execution Plans\CTO-07_Fig 3-1.dwg 11/18/10

ATTACHMENT 1

PROJECT CONTRACTOR QUALITY CONTROL PLAN

This page intentionally left blank.

Base Realignment and Closure
Program Management Office West
1455 Frazee Road, Suite 900
San Diego, California 92108-4310

CONTRACT NO. N62473-10-D-0809
CTO NO. 0007

FINAL

PROJECT CONTRACTOR QUALITY CONTROL PLAN

January 20, 2011

PARCEL E, 500 SERIES AREA
RADIOLOGICAL REMEDIATION AND SUPPORT
HUNTERS POINT SHIPYARD
SAN FRANCISCO, CALIFORNIA

DCN: RMAC-0809-0007-0005

TETRA TECH EC, INC.
1230 Columbia Street, Suite 750
San Diego, California 92101-8530

Greg Joyce
QC Program Manager

TABLE OF CONTENTS

TABLE OF CONTENTS
(Continued)

PAGE

TABLE OF CONTENTS
(Continued)

TABLES

FIGURES

APPENDICES

This page intentionally left blank.

ABBREVIATIONS AND ACRONYMS

AHA	Activity Hazard Analysis
APP	Accident Prevention Plan
BRAC	Base Realignment and Closure
CMT	Construction Management Technician
CQC	Contractor Quality Control
CSO	Caretaker Site Office
CTO	Contract Task Order
DCN	Design Change Notice
DFW	definable feature of work
DN	deficiency notice
DON	Department of the Navy
EHS	Environmental Health and Safety
EM	Engineer Manual
FCR	Field Change Request
HPS	Hunters Point Shipyard
NCR	Nonconformance Report
PCQC	Project Contractor Quality Control
PESM	Project Environmental Safety Manager
PjM	Project Manager
PQCM	Project Quality Control Manager
QA	quality assurance
QAO	Quality Assurance Officer
QC	quality control
QCPM	Quality Control Program Manager
ROICC	Resident Officer in Charge of Construction
RPM	Remedial Project Manager
SFRA	San Francisco Redevelopment Agency

ABBREVIATIONS AND ACRONYMS
(Continued)

SSHO	Site Safety and Health Officer
SSHP	Site Safety and Health Plan
TtEC	Tetra Tech EC, Inc.
UFGS	Unified Facilities Guide Specification

1.0 INTRODUCTION

This Project Contractor Quality Control (PCQC) Plan establishes the procedures and methods to be implemented for specific activities pertaining to sanitary sewer and storm drain removal and radiological surveys to be conducted within Parcel E, 500 Series Area, Hunters Point Shipyard (HPS), San Francisco, California. Tetra Tech EC, Inc. (TtEC) has been contracted by the Department of the Navy (DON) to perform this work at HPS for the Base Realignment and Closure (BRAC) Program Management Office West under Naval Facilities Engineering Command Southwest Contract No. N62473-10-D-0809, Contract Task Order (CTO) 0007. This PCQC Plan fulfills the TtEC quality control (QC) system requirements.

1.1 SITE BACKGROUND

HPS is located in the southeastern part of San Francisco on a long promontory that extends east into San Francisco Bay. Presently, HPS encompasses approximately 866 acres, including approximately 420 acres on land. The land portion of HPS was purchased by the DON in 1939 and leased to Bethlehem Steel Corporation. At the start of World War II in 1941, the DON took possession of the property and operated it as a shipbuilding, repair, and maintenance facility until 1974 when the DON deactivated HPS. From 1976 to 1986, the DON leased HPS to Triple A Machine Shop, Inc. (Triple A), a private ship repair company. In 1986, Triple A ceased operations and the DON resumed occupancy through 1989. In 1991, HPS was placed on the DON's BRAC list, and its mission as a DON shipyard ended in April 1994.

A 1998 BRAC decision requires full closure and cleanup of HPS. Essentially, this may entail removal of buildings and structures, including subsurface systems, as well as removal of contaminated materials. HPS was divided into 11 parcels, A B, C, D-1, D-2, E, E-2, F, G, UC1 and UC2. Parcel A, consisting of the most inland 75 acres, was transferred to the San Francisco Redevelopment Agency (SFRA) in 2004. The remainder of HPS will be conveyed to the SFRA once the environmental cleanup is complete.

1.2 PURPOSE

The purpose of this PCQC Plan is to establish specific procedures and methods for field inspections, and provide an effective QC system to ensure the quality of all work performed by TtEC and its subcontractor personnel during the removal, building preparation, and survey activities. This plan is applicable to all definable features of work (DFWs) listed in Section 3.0 and will be available at the project field office. All work activities will be conducted in accordance with this PCQC Plan and the Execution Plan to which it is attached.

This page intentionally left blank.

2.0 PROJECT ORGANIZATION, RESPONSIBILITY, AND POINTS OF CONTACT

This section describes the organization and authority of project personnel. The organizational structure, functional responsibilities, levels of authority, and lines of communication within the organization have been established to ensure high-quality work. The project organization chart showing the reporting lines for key personnel is provided on Figure 2-1. The responsibilities of key personnel are described in the following subsections. A listing of the points of contact for the project is provided in Section 2.12.

2.1 REMEDIAL PROJECT MANAGER

The Remedial Project Manager (RPM) has primary responsibility with the DON for day-to-day management of the project activities performed under this Execution Plan and for its successful completion. The RPM is responsible for the following:

- Perform project management for the DON.
- Ensure the project scope of work requirements are fulfilled.
- Oversee the project cost and schedule.
- Provide formal technical direction to the TtEC project team, as needed.
- Coordinate with other RPMs for other projects being performed to ensure that proper controls are in place.
- Act as lead in interacting with regulatory agencies.

2.2 QUALITY ASSURANCE OFFICER

The Quality Assurance Officer (QAO) is the DON representative with primary responsibility for ensuring that the contract-required quality assurance (QA) measures are in place and effective for the work performed. The QAO is responsible for the following:

- Review and approval of Sampling and Analysis Plans.
- Provide DON oversight of the TtEC QA Program.
- Provide quality-related directives through the Contracting Officer.
- Act as the point of contact for matters pertaining to generating data and maintaining the quality of data.
- Authorize the suspension of project execution if QA requirements are not adequately met.

2.3 RESIDENT OFFICER IN CHARGE OF CONSTRUCTION

The Resident Officer in Charge of Construction (ROICC) is the DON representative with the primary responsibility for providing on-site QA and safety oversight of contractors. The ROICC is responsible for the following:

- Verify that all work has been completed per contract and technical specifications prior to final government acceptance.
- Perform field verification for QA of contractor's implementation of the QC Program.
- Notify the contractor of any work not in compliance.
- Notify the contractor of any work being performed in an unsafe manner.
- Interact with the contractor's Project Quality Control Manager (PQCM) on quality-related issues.
- Review and sign waste manifests as the generator's representative.
- Review daily Contract Quality Control (CQC) Reports for completeness and accuracy.
- Attend preparatory phase, initial phase, prefinal, and final acceptance inspections.
- Attend weekly QC meetings.

2.4 PROJECT MANAGER

The Project Manager (PjM) is the TtEC representative responsible for the direction, execution, and successful completion of project tasks to achieve overall project goals. The PjM has responsibility for and the authority to direct all segments of the project including technical, construction, and administrative activities. The PjM is responsible for the following:

- Coordinate work activities of subcontractors and TtEC personnel and ensure that all personnel adhere to the administrative and technical requirements of the project.
- Monitor the status and progress of work and ensure that project deliverables are completed on time and within the project budget.
- Monitor the budget and schedule, and notify the client and the Program Manager of any changes that may require administrative actions.
- Ensure adherence to the quality requirements of the contract, project scope of work, and the QC plans.
- Ensure that all work meets the requirements of the project plans, procedures, and technical specifications and complies with applicable codes and regulations.
- Ensure that all work activities are conducted in a safe manner in accordance with the Accident Prevention Plan (APP)/Site Safety and Health Plan (SSHP) – Safety and Health Requirements (Engineer Manual [EM] 385-1-1) (USACE 2008), and all applicable Occupational Safety and Health Administration regulations.

- Ensure that change conditions are properly identified and documented with the appropriate approvals.
- Serve as the primary contact with the DON and TtEC for actions and information related to the work and make sure to include appropriate TtEC lead and experts in decision-making.
- Coordinate satisfactory resolution and completion of evaluation and acceptance for Nonconformance Reports (NCRs).
- Attend required meetings, including the preconstruction conference, weekly QC meetings, pre- and postconstruction site inspections, and other scheduled and unscheduled meetings.

2.5 PROJECT ENVIRONMENTAL SAFETY MANAGER

The Project Environmental Safety Manager (PESM) is the TtEC representative responsible for implementing and overseeing the Contract Health and Safety Program and for developing, implementing, and approving all APP/SSHP documents. Any changes to the established Contract Health and Safety Program or APP/SSHP must be at the direction and approval of the PESM, with concurrence of the DON Administrative Contracting Officer. The PESM or designee will not necessarily be on-site during all removal and survey activities but will be readily available for consultation when required.

The PESM or designee is a Certified Industrial Hygienist who is certified by the American Board of Industrial Hygiene. The PESM supervises and directs the activities of the Site Safety and Health Officer (SSHO). The PESM has the authority to stop unsafe operations, remove unqualified personnel from the work area, and approve changes to the APP/SSHP. The PESM is responsible for the following:

- Oversee all aspects of the APP/SSHP from development to implementation.
- Advise the SSHO on all related health and safety matters.
- Review site-specific plans for completeness and compliance.
- Review other site documents as they affect health and safety (e.g., Activity Hazard Analyses [AHAs] and sampling plans).
- Review and evaluate all monitoring results.
- Establish and monitor all related health and safety procedures through site safety inspections and audits.
- Ensure that TtEC employees receive required Environmental Health and Safety (EHS) regulatory training.
- Fulfill specific responsibilities for project EHS personnel that are identified within each EHS procedure.

- Function as a technical resource for all environmental compliance, safety, loss control, and industrial hygiene issues.

2.6 QUALITY CONTROL PROGRAM MANAGER

The Quality Control Program Manager (QCPM) is the TtEC representative responsible for the oversight of program QC, including field activities and data acquisition. The QCPM is responsible for the following:

- Coordinate and resolve quality concerns.
- Provide quality-related direction and ensure the training of the PQCM and others performing quality-related functions.
- Suspend project activities if quality standards are not maintained.
- Interact with the DON, including the QAO, on quality-related issues.
- Review audit and surveillance reports.
- Implement the DON technical directives related to quality.

2.7 PROJECT SUPERINTENDENT

The Project Superintendent is a TtEC representative who reports to the PjM and is responsible for coordinating, directing, implementing, and supervising site construction activities. The Project Superintendent or designated representative will be on-site at all times during field activities. The Project Superintendent is responsible for the following:

- Implement field activities in accordance with the Execution Plan.
- Direct support personnel and subcontractors.
- Administer site access and communication.
- Maintain the work site, facilities, vehicles, and equipment.
- Coordinate work activities and ensure all personnel adhere to the administrative and technical requirements of the project.
- Prepare status reports and estimate future scheduling needs.
- Prepare daily Contractor Production Reports.
- Monitor the status and progress of field activities and ensure that project deliverables are completed on time and within the project budget.
- Ensure work activities in the field are conducted in a safe manner in accordance with the APP/SSHP.
- Investigate with the SSHO all incidents, accidents, injuries, illnesses, and near misses.

2.8 PROJECT QUALITY CONTROL MANAGER

The PQCM is the TtEC representative responsible for overall management of project QC and reports to the QCPM. The PQCM has the authority to stop work on site-related issues affecting the quality of the work performed and for directing the correction of all nonconforming work. The PQCM or designated representative will be on-site at all times during field activities. The PQCM is responsible for the following:

- Provide and maintain an effective QC system for all site activities.
- Perform ongoing field inspection to verify that all work is in compliance with both contract and technical specifications.
- Monitor QC activities to ensure conformance with authorized policies, procedures, contract specifications, required standards, and methods of quality construction.
- Prepare the daily CQC Reports.
- Coordinate and perform the three phases of inspection (preparatory, initial, and follow-up) for all DFWs.
- Responsible for issuance, maintenance, and enforcement of NCRs and other quality actions.
- Ensure that on-site and off-site inspections, testing, and sampling are performed in accordance with the plans, procedures, specifications, and applicable codes.
- Ensure that all required tests and inspections are performed and documented.
- Conduct required QC meetings, including the coordination and mutual understanding meeting, site survey visits, and other scheduled meetings.
- Coordinate and maintain submittal register, photograph log sheet, request for information, and NCR log and other required logs or registers.
- Review and maintain records of approved submittals, Design Change Notices (DCNs), and Field Change Requests (FCRs) for construction activities.
- Inspect material delivery handling and storage in accordance with technical specifications.
- Review and approve submittals and shop drawings and/or forward submittals as information only or for approval.
- Review project plans and procedures for quality issues.
- Confirm the removal or rework of material, equipment, or work activity that is not in compliance with plans and specifications.
- Maintain the Submittal Register Log.
- Perform daily QC safety inspections and logging in the QC logs (EM 385-1-1 01.A.12.b) (USACE 2008).

The PQCM will not be designated as the safety competent person.

2.9 SITE SAFETY AND HEALTH OFFICER

The SSHO is the TtEC representative who reports directly to the PESM and ensures all elements of the APP/SSHP are implemented and enforced on-site. The SSHO has full authority to issue stop work orders or evacuation orders when work operations or noncompliance(s) may threaten the health and safety of site workers or the public. The SSHO is responsible for the following:

- Ensure that all personnel understand the requirements of the TtEC EHS program and procedures through training and communication.
- Investigate with the Project Superintendent all incidents, accidents, injuries, illnesses, and near misses.
- Ensure project personnel are trained in the hazards of substances used on the project, maintain Material Safety Data Sheets and make them accessible to project personnel, and perform inspections and oversight to ensure the Waste Management Plan is being followed.
- Ensure tailgate safety meetings are conducted daily prior to start of work and are documented.
- Ensure project safety equipment is inspected and in good working order as required by the EHS program.
- Coordinate site health and safety requirements with the Project Superintendent and PjM.
- Ensure that all health and safety monitoring equipment and personal protective equipment are maintained and direct site-monitoring activities.
- Coordinate daily field activities with the Project Superintendent.
- Coordinate site safety and emergency response duties and verify site communications system with site personnel.
- Report incidents to the ROICC as required by EM 385-1-1 (USACE 2008).
- Report immediately to the PjM, RPM, and ROICC any fatal injury, persons admitted to a hospital, or damage to government property.
- Ensure all personnel have the required training and medical clearance prior to entering the exclusion zone at the site; inform the Project Superintendent of any site personnel with medical restrictions.
- Determine and post routes to medical facilities and telephone numbers for emergency transportation to medical facilities.
- Serve as the Project Hazard Communication Coordinator.
- Maintain training records and medical certifications for all on-site personnel, including subcontractors.
- Initiate revisions or changes to the APP/SSHP to support changing site conditions.
- Maintain site control procedures.

- Maintain current records of certification for first aid and cardiopulmonary resuscitation training for field personnel.
- Attend meetings, including the preconstruction conference, weekly QC meetings, pre- and postconstruction site inspections, and other project meetings.

2.10 PROGRAM CHEMIST

The Program Chemist is the TtEC representative who oversees sample collection, handling, analysis, and analytical data reporting. The Program Chemist is responsible for the following:

- Develop the Sampling and Analysis Plan.
- Evaluate and select qualified subcontract laboratories.
- Implement data QC procedures and perform audits of field performance.
- Review off-site laboratory data prior to use.
- Ensure that a proper review of on-site laboratory data is performed.
- Coordinate data validation of off-site laboratory data.
- Review data validation reports.
- Prepare analytical reports and supporting project reports.

2.11 SUBCONTRACTORS AND VENDORS

Qualified subcontractors may be selected to provide various construction services for this project. The subcontractor is required to provide labor, material, and equipment necessary to conduct construction activities as directed by the PjM. Subcontractors and vendors will conform to TtEC's quality requirements including all approved procedures, technical specifications, and contract provisions.

The subcontractor is responsible for field inspection of their construction and operating activities. TtEC personnel will monitor, oversee, and make on-site observations and inspections of work in progress to determine whether the subcontractor's work is proceeding in accordance with TtEC's quality requirements.

Subcontractor personnel are responsible for maintaining a daily log of the project activities they perform and for providing information needed to complete the daily CQC Report. All inspection records, including inspection reports, deficiency reports, and reinspections of corrective actions, will be documented.

The following subcontractors and their services are anticipated to be used in support of the Parcel E, 500 Series Area removal action:

- Radiological Survey & Remedial Services, LLC – Health physics support, data evaluation, and radiological instruments
- IO Environmental & Infrastructure – Data management and air sampling
- Aleut World Solutions, LLC – Health physics support and radiological instruments
- Sterling Environmental – Asbestos materials removal
- Ten-wheeler dump truck and operators – Out to bid

2.12 POINTS OF CONTACT

The following is a list of the key project, DON, and regulatory points of contact:

Entity	Project Title	Contact Information
BRAC PMO West 1455 Frazee Road, Ste. 900 San Diego, CA 92108-4310	RPM	Mr. Jim Whitcomb (619) 532-0936 james.h.whitcomb@navy.mil
BRAC PMO West 1455 Frazee Road, Ste. 900 San Diego, CA 92108-4310	RPM	Mr. Chris Yantos (619) 532-0912 christopher.yantos.ctr@navy.mil
NAVFAC SW 1455 Frazee Road, Ste. 900 San Diego, CA 92108-4310	Contract Specialist	Ms. Cindy Mafara (619) 532-0978 cindy.mafara@navy.mil
NAVFAC SW 2450 Saratoga Street, Building 114, Ste. 200 Alameda Point, Alameda, CA 94501-7545	ROICC	Ms. Shirley Ng (510) 749-5939 shirley.ng@navy.mil
NAVFAC SW 2450 Saratoga Street, Building 114, Ste. 200 Alameda Point, Alameda, CA 94501-7545	ROICC	Andy Uehisa (510) 749-5875 andrew.uehisa@navy.mil
BRAC PMO West CSO – San Francisco Bay Area 410 Palm Ave., Building 1, Ste. 161 San Francisco, CA 94130-1806	CSO (Field Team Leader)	Mike Mentink (415) 743-4729 mike.mentink@navy.mil
BRAC PMO West CSO – San Francisco Bay Area 410 Palm Ave., Building 1, Ste. 161 San Francisco, CA 94130-180	CSO	Mel Asuncion (415) 743-4721 melecio.asuncion@navy.mil
NAVSEA Detachment RASO Building 1971 NWS P.O. Box Drawer 260 Yorktown, VA 23691-0260	Radiological Site Manager	Laurie Lowman (757) 887-4692 laurie.lowman@navy.mil

Entity	Project Title	Contact Information
NAVFAC SW 1220 Pacific Coast Highway San Diego, CA 92132-5190	QAO	Mr. Narciso Ancog (619) 532-3046 narciso.ancog@navy.mil
EPA, Region IX 75 Hawthorne Street (SFD-8-1) San Francisco, CA 94105	EPA RPM	Mark Ripperda (415) 972-3028 ripperda.mark@epa.gov
Cal/EPA DTSC Office of Military Facilities 700 Heinz Ave., Building F, Ste. 200 Berkeley, CA 94710	Cal/EPA DTSC RPM	Ryan Miya (510) 540-3775 rmiya@dtsc.ca.gov
California Water Board 1515 Clay Street, Ste. 1400 Oakland, CA 94612	Water Board RPM	Ross Steenson (510) 622-2445 rsteenson@waterboards.ca.gov
TtEC Hunters Point Shipyard 200 Fisher Avenue San Francisco, CA 94124	Project Manager	Bill Dougherty (415) 216-2731 bill.dougherty@tetratech.com
TtEC Hunters Point Shipyard 200 Fisher Avenue San Francisco, CA 94124	Assistant Project Manager	Rick Weingarz (415) 216-2733 richard.weingarz@tetratech.com
TtEC 1230 Columbia St., Ste. 750 San Diego, CA 92101-8536	QCPM	Mr. Greg Joyce (360) 780-0371 greg.joyce@tetratech.com
TtEC Hunters Point Shipyard 200 Fisher Avenue San Francisco, CA 94124	PQCM	Mr. Rich Kanaya (415) 216-2759 rich.kanaya@tetratech.com
TtEC Hunters Point Shipyard 200 Fisher Avenue San Francisco, CA 94124	Alternate PQCM	Mr. Adam Berry (415) 216-2758 adam.berry@tetratech.com
TtEC 1230 Columbia St., Ste. 750 San Diego, CA 92101-8536	PESM	Mr. Roger Margotto, CIH, CSP (619) 471-3503 roger.margotto@tetratech.com.
TtEC Hunters Point Shipyard 200 Fisher Avenue San Francisco, CA 94124	SSHO	Mr. Daniel Keenan, ASP (415) 671-1990 daniel.keenan@tetratech.com
TtEC 17885 Von Karman Avenue, Ste. 500 Irvine, CA 92614-6213	Program Chemist	Ms. Lisa Bienkowski (949) 809-5028 lisa.bienkowski@tetratech.com
TtEC 17885 Von Karman Avenue, Ste. 500 Irvine, CA 92614-6213	Regulatory Compliance Specialist	Ms. Jennifer Dessort (949) 809-5063 jennifer.dessort@tetratech.com

Abbreviations and Acronyms:
ASP – Associate Safety Professional
BRAC – Base Realignment and Closure
Cal/EPA – California Environmental Protection Agency
CIH – Certified Industrial Hygienist
CSO – Caretaker Site Office
CSP – Certified Safety Professional
DTSC – Department of Toxic Substances Control
EPA – U.S. Environmental Protection Agency
NAVFAC SW – Naval Facilities Engineering Command Southwest
NAVSEA – Naval Sea Systems Command
PESM – Project Environmental Safety Manager
PjM – Project Manager
PMO – Program Management Office
PQCM – Project Quality Control Manager
QAO – Quality Assurance Officer
QCPM – Quality Control Program Manager
RASO – Radiological Affairs Support Office
ROICC – Resident Officer in Charge of Construction
RPM – Remedial Project Manager
SSHO – Site Safety and Health Officer
TtEC – Tetra Tech EC, Inc.
Water Board – Regional Water Quality Control Board

3.0 DEFINABLE FEATURES OF WORK

A DFW is an activity or task separate and distinct from other activities that requires separate control activities. The DFW establishes the control measures required to verify both the quality of work performed and compliance with specified requirements, which include inspecting materials and workmanship before, during, and after each DFW. Preparatory and initial inspections will be performed on all DFWs, with the exception of mobilization and site cleanup and final inspection (demobilization). Activities that will be covered by the PQCM during the inspections are listed in Table 3-1. The following DFWs have been identified for the project:

- Environmental resources survey
- Clearing of vegetation and/or pavement
- Geophysical survey
- Radiological surveys
- Identification and removal of radioactive material
- Excavation and removal of soil/piping
- Final Status Survey (including systematic and biased sampling)
- Backfill placement and compaction
- Demolition of former Building 529 vault
- Asbestos abatement (Buildings 500 and 521)
- Site restoration

This page intentionally left blank.

4.0 SUBMITTALS

This section describes the review and approval process for submittals. TtEC will institute and maintain a submittal register (Appendix B) to track submittals from issuance to approval. A list of required submittals will be developed at the initiation of project activities and revised as necessary. Submittals will be scheduled, reviewed, certified, and managed in accordance with the procedures defined in this section.

Standard Unified Facilities Guide Specification (UFGS) submittal titles are as follow:

- SD-01 Preconstruction Submittals
- SD-02 Shop Drawings
- SD-03 Product Data
- SD-04 Samples
- SD-05 Design Data
- SD-06 Test Reports
- SD-07 Certificates
- SD-08 Manufacturer's Instructions
- SD-09 Manufacturer's Field Reports
- SD-10 Operation and Maintenance Data
- SD-11 Closeout Submittals

Descriptions of the submittals listed above are provided in UFGS Section 014502 (NAVFAC 2009). Not all submittals listed above are necessarily applicable to the DON's scope of work for this project.

4.1 REVIEW OF SUBMITTALS

Submittals will be reviewed to ensure completeness, accuracy, and contract compliance. Submittal of a certification will be inspected and approved by the PQCM for conformance to the project specifications or certification criteria. All items will be checked and approved by the PQCM or designated representative. Any submittals requiring modifications or changes will be returned to the originating organization for correction and then resubmitted for review and approval prior to acceptance. Approved submittals will be stamped, signed or initialed, and dated. During the preparatory phase of the QC inspections, the PQCM or designated representative will ensure that all materials and equipment have been tested and approved. No field activities will be performed without the required approval of applicable submittals.

4.2 SUBMITTAL PROCESS

Required submittals will be provided to project personnel as determined by the distribution schedule. Each submittal will be assigned a unique document control number.

A transmittal form will accompany each submittal. Each transmittal will be identified with:

- Contract and CTO number
- Name and address of the submitting organization
- Date of submittal
- Description of item being submitted, including reference to specification section (if applicable)
- Approval of submitting organization indicating conformance to the requirements

The PQCM will update the submittal register regularly.

4.3 REVIEW AND PROCESSING OF SUBMITTALS THAT DO NOT REQUIRE DON APPROVAL

Material submitted for review by the PQCM will indicate whether or not it conforms to established requirements. The PQCM will inform the submitter of the results of the review. The submittal log will be updated to indicate the status and will be submitted with the last CQC report of each month.

Conforming submittals will be transmitted to project and DON personnel as determined by the distribution schedule. A transmittal form will accompany all items sent to the DON and will list each item transmitted, the date it was reviewed by the PQCM, and its review status.

Nonconforming submittals will be returned to the submitter for correction, resolution of comments, and resubmitted.

4.4 REVIEW AND PROCESSING OF SUBMITTALS THAT REQUIRE DON APPROVAL

Submittals reviewed by the PQCM will be transmitted to the DON in accordance with the project distribution schedule for further review and approval. All items sent to the DON will use a transmittal form that will indicate each item transmitted, the date reviewed by the PQCM, and its review status. Upon completion of review, the ROICC will either return the transmittal form to the PQCM for further action or accept the submittal as complete.

The PQCM will advise the submitter of the results of the review in writing and include any comments. The submittal log will be updated to indicate status.

Nonconforming submittals may be returned to the submitter for correction, resolution of comments, and resubmitted, if required.

4.5 REVISED SUBMITTALS

Revised submittals will be logged, reviewed, and processed in a manner identical to the initial submittal. Revisions to a submittal will be identified using an alphabetic suffix to the original submittal number, e.g., submittal 18 will be revised to 18(a).

This page intentionally left blank.

5.0 TESTING

The PQCM or designated representative will verify the performance of all tests specified or required by the project-specific plans to ensure that control measures are adequate to provide a product conforming to contract specifications. General requirements for testing procedures to be implemented for this project are included in the Work Plan. The type, number, and frequency of required tests are specified in the Test Plan and Log (Appendix B). These tests include both operational and acceptance testing as appropriate.

5.1 DOCUMENTATION

All test results, both passing and failing, will be documented in the daily CQC Report for the day the results are obtained. Paragraph reference, location where tests were taken, and the sequential control number identifying the test will be given. The test reports will be available for review by the ROICC and transmitted with the Project Closure Report.

5.2 LABORATORY SERVICES

An independent testing laboratory will provide laboratory services, as needed. The laboratory will be selected and qualified in accordance with recognized industry and applicable project requirements. All radiological and chemical analysis to be performed during the removal action will be performed by TestAmerica-St. Louis under CTO 0004. QC for radiological and chemical analyses is addressed in the Basewide Radiological Support Sampling and Analysis Plan, provided as Attachment 1 to the Basewide Radiological Support Execution Plan (TtEC 2011). Copies of the accreditations are provided in Attachment 2 to the Basewide Radiological Support Execution Plan.

5.3 TESTING PLAN LOG

The Test Plan and Log (Appendix B) lists tests required by the project specifications and drawings. The Test Plan and Log will be submitted with the last CQC report of each month. Testing will be conducted to verify that control measures are adequate to provide a product conforming to contract specifications. General requirements for testing procedures to be implemented for this project are included in the Basewide Radiological Support Sampling and Analysis Plan provided as Attachment 1 of the Basewide Radiological Support Execution Plan (TtEC 2011). All radiological and chemical analyses will be performed under CTO 0004.

This page intentionally left blank.

6.0 QUALITY CONTROL MEETINGS

6.1 COORDINATION AND MUTUAL UNDERSTANDING MEETING

Prior to the start of site work, a coordination and mutual understanding meeting will be held to discuss the QC Program requirements. DON personnel attending the meeting will include the RPM, ROICC, the ROICC's Construction Management Technician (CMT), and the BRAC Environmental Compliance Manager. The purpose of this meeting is to develop a mutual understanding of the QC details, including forms to be used, administration of on-site and off-site work, coordination of the field activities, production, and the PQCM duties with the ROICC. At a minimum, the TtEC personnel required to attend the meeting will include the PjM, Field Engineer, Project Superintendent, PQCM, and SSHO. Minutes of the meeting shall be prepared by the PQCM and signed by the PjM and the DON's RPM and/or ROICC or designated representative. The meeting may be held in conjunction with the preconstruction meeting.

6.2 QC MEETINGS

After the start of field activities, the PQCM will conduct QC meetings at a frequency of once per week or as required by the ROICC. The meetings will be held at the project site and will be attended by the ROICC, ROICC CMT, Project Superintendent, SSHO, and PQCM. The PQCM will notify the ROICC at least 48 hours in advance of each meeting. The following will be covered at each meeting:

- Review the minutes of the previous meeting.
- Review the schedule:
  - Work or testing accomplished since last meeting
  - Rework items identified since last meeting
  - Rework items completed since last meeting
- Review the status of submittals:
  - Submittals reviewed and approved since last meeting
  - Submittals required in the near future
- Review the work to be accomplished in the following 3 weeks, documentation required, and schedule for the three phases of control and testing:
  - Establish completion date for rework items
  - Required preparatory phase inspections
  - Required initial phase inspections

  - Required follow-up phase inspections
  - Required testing
  - Status of off-site work or testing
  - Required documentation

- Identify deficient conditions.
- Resolve QC and production problems.
- Address items that may require revisions to the PCQC Plan.

7.0 INSPECTION

This section discusses the inspection process for the DFWs that will ensure compliance with the contract. The DFWs for this project are identified in Section 3.0 and listed in Table A.3-1.

The PCQC Plan includes implementing the following three phases of control for all aspects of the work specified:

- Preparatory phase
- Initial phase
- Follow-up phase

7.1 PREPARATORY PHASE INSPECTION

The PQCM will conduct preparatory phase inspections prior to starting the DFWs listed in Table 3-1 with the exception of mobilization and demobilization. These inspections shall include the following:

- Review the project-specific plans (Task-specific Plans, Base-wide Storm Drain and Sanitary Sewer Removal Work Plan, Execution Plan, Demolition Work Procedure, Contractor Asbestos Abatement Plan, etc.).
- Ensure that all required procurement forms for supplies and services are approved.
- Ensure that provisions have been made to provide the required QC inspection.
- Ensure that all personnel have the required training and certifications needed to perform the work.
- Examine the work area to ensure that all required preliminary work has been completed and is in compliance with the approved project plans.
- Examine the required materials and equipment to ensure that they are properly delivered to the site, conform to specifications, and are properly stored.
- Review the appropriate AHAs to ensure that safety requirements are met.
- Discuss procedures for performing the work, including potential repetitive deficiencies.
- Document workmanship standards for the particular phase of work.
- Ensure that the PCQC Plan for the work to be performed has been accepted by the DON.

The PQCM will conduct frequent internal inspections of mobilization and demobilization. The PQCM is not required to notify the DON or the PjM prior to these inspections.

The PjM, DON RPM, and ROICC will be notified at least 2 working days in advance of each preparatory phase activity. This phase will include a meeting conducted by the PQCM and

attended by the Project Superintendent and any personnel involved in performing the DFW. When a subcontractor will accomplish a DFW, that subcontractor foreman shall attend the preparatory phase meeting.

The issues discussed during the preparatory phase meetings will be documented on the Preparatory Inspection Checklist (Appendix B). The PQCM will explain the acceptable level of workmanship required to personnel performing work activities.

7.2 INITIAL PHASE INSPECTION

An initial inspection will be performed at the beginning of a DFW and will include the following:

- Check preliminary work to ensure that it is in compliance with contract requirements.
- Review the Inspection Checklist documenting results of the preparatory meeting.
- Verify full contract compliance, including required control inspections.
- Establish the required level of workmanship, testing, and inspection to ensure that work meets minimum acceptable standards.
- Resolve all differences.
- Check safety requirements to include compliance with and upgrading of the APP/SSHP and AHAs.

The PjM, DON RPM, and ROICC will be notified at least 2 working days in advance of each initial phase activity. The PQCM will document initial inspections for each item using the Initial Phase Inspection Checklist (Appendix B) and attach it to the daily CQC Report. The location of the initial phase inspection and documentation will be identified for future reference and comparison with follow-up inspections.

The initial phase inspection will be reviewed each time a new crew arrives on-site or when DFWs change.

7.3 FOLLOW-UP PHASE INSPECTION

During the completion of a particular DFW, follow-up inspections will be conducted to ensure compliance with contract requirements. The frequency of the follow-up inspections will depend on the extent of the work being performed. Each follow-up inspection will be documented on the daily CQC Report. A Follow-up Inspection Checklist will be generated for any deficient conditions identified during the initial inspection and attached to the daily CQC Report when all items are resolved. A final follow-up check will be conducted on any completed work phase prior to the commencement of a subsequent phase.

7.4 RECEIPT INSPECTION

The PQCM will conduct inspections of materials prior to their use and installation. These inspections will be documented on a receipt inspection form and maintained on-site. Any material(s) that does not meet design specifications will be rejected and returned to the vendor. Nonconforming material will be segregated and marked accordingly, to prevent inadvertent use. The PQCM will record on the daily CQC Report that a material inspection was performed.

7.5 ADDITIONAL INSPECTIONS

The PQCM may conduct additional inspections on the same DFWs under the following circumstances:

- If the quality of ongoing work is unacceptable as determined by the PQCM, PjM, Project Superintendent, DON RPM, or ROICC
- If the quality of the work is suspected of being below the established criteria of acceptance
- If work on a DFW is resumed after a substantial period of inactivity
- If other problems develop

7.6 COMPLETION INSPECTION

Completion inspections will be performed as summarized in this section.

7.6.1 Construction Quality Control Completion Inspections

The PQCM will conduct a detailed inspection prior to the prefinal inspection, when all of the work or an increment of work is deemed to be substantially complete. The work will be inspected for conformance to plans and specifications, workmanship, and completeness. The PQCM will prepare an itemized list of work that does not conform to plans and specifications, inferior workmanship, or incomplete work. The list will also include outstanding administrative items, such as record (as-built) drawings. The list will be included in the QC documentation and submitted to the PjM following the inspection and will specify an estimated date for correction of each deficiency. The completion inspection will be documented on the Completion Inspection Checklist.

7.6.2 Prefinal Inspection

The PjM or designated representative will conduct the prefinal inspection. The DON RPM, ROICC, PQCM, Project Superintendent, and other primary management representative(s), as applicable, will attend. The PjM will schedule the prefinal inspection when notified by the PQCM that the work is ready for inspection. The PQCM is required to verify at this time that all specific items previously identified as being unacceptable, along with all remaining project work, will be complete and acceptable by the date scheduled for the prefinal inspection. If incomplete

or unacceptable work is found during the prefinal inspection, a punch list will be generated by TtEC in consultation with the ROICC and Caretaker Site Office (CSO). A copy of the punch list will be forwarded to the ROICC and CSO, the on-site Navy representatives for the Contracting Officer, and the RPM. The original punch list will be maintained by the PQCM.

7.6.3 Final Acceptance Inspection

The PjM will schedule the final acceptance inspection based on notification from the PQCM of readiness. The DON RPM, Project Superintendent, ROICC, PQCM, and other primary management representative(s), as applicable, will attend. Notification will be provided prior to the planned final acceptance inspection date and must include verification that all specific items previously identified as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final acceptance inspection.

7.7 INSPECTION DOCUMENTATION

The PQCM is responsible for maintaining the inspection records. Inspection records will be legible and clearly provide all information necessary to verify that the items or activities inspected conform to the specified requirements. In the case of nonconforming conditions, the PQCM will provide evidence that the conditions were brought into conformance or otherwise accepted by the ROICC. All inspection records will be made available to the DON.

8.0 DOCUMENTATION

Preparation, review, approval, and issuance of documents affecting quality will be controlled to the extent necessary to ensure compliance to specified requirements. Project documents that will be controlled, if issued, include the following:

- Meeting minutes, conference notes, and confirmation notes
- Submittal Register
- Inspection documentation
- Contractor Production Report
- Daily CQC Report
- Material inspection and shipping logs
- NCRs
- Deficiency Notices (DNs)
- DCNs
- NCR log
- FCRs
- FCR/DCN log
- Rework Items List
- Photograph log
- Field logbooks

8.1 DAILY CONTRACTOR QUALITY CONTROL REPORT

The PQCM is responsible for maintenance of current records of QC operation, activities, inspections, and tests performed, including the work of subcontractors and suppliers. The records will include factual evidence that required QC activities and tests were performed. The daily CQC Report will be completed to document site activities covered by the PCQC Plan and will include:

- Records of inspection and /or testing performed
- Identification and location of each DFW and its current phase (preparatory, initial, follow-up) of completion
- Results of inspections and/or testing
- Location and description of deficiencies

- Deficiencies corrected as of the date of the report
- Rework items
- Deviations from plans, difficulties, and resolution
- Test and/or control activities performed with results and references to specifications and/or plan requirements, including the control phase (preparatory, initial, and follow-up) and deficiencies (along with corrective action)
- Material received, with statement as to its acceptability and storage
- Submittals reviewed with contract reference, reviewer, and action taken
- Off-site surveillance activities, including actions taken

The records will describe both conforming and nonconforming features and include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The daily CQC Report attached to the Contractor Production Report will be furnished to the ROICC by 10:00 a.m. on the first work day following the date covered by the report, or as agreed to by the ROICC. The report need not be submitted for days in which no work is performed. At a minimum, one report will be prepared and submitted for every 7 days of no work and on the last day of a no-work period. All calendar days will be accounted for throughout the life of the contract. The first report following a day of no work will summarize work for that day only. The report submitted on the last work day of each month will include the Rework Items List, Submittal Register, and Test Plan and Log. Copies of the reports will be maintained on-site and will be available for review during business hours.

The daily CQC Report will be signed and dated by the PQCM and contain the following statement: "On behalf of the Contactor, I certify that this report is complete and correct, and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report." Other appropriate personnel, including subcontractors responsible for completion of activities, will sign and date the report as required. The report will include copies of test reports.

8.2 CONTRACTOR PRODUCTION REPORT

The Contractor Production Report will be prepared for each day work is performed and will be attached to the daily CQC Report prepared for the same day. The Contractor Production Report will be prepared, signed, and dated by the Project Superintendent or designated representative, and will contain the following information:

- Contractor and subcontractor(s) and their area of responsibility
- Trades working on the project that day and number of personnel
- Operating equipment, with hours worked, idle, or down for repair

- Work performed that day, including location, description, weather conditions, and who did the work
- Any delays encountered
- Site visitors and the purpose of the visit
- Job safety evaluations stating what was checked, results, and instructions or corrective actions
- A list of instructions given and/or received and conflicts in plans and/or specifications
- Contractor's verification statement

8.3 LOGBOOKS

The PQCM will maintain a logbook to document QC activities. The information in the logbook is intended to serve as a phone log and memory aide in the preparation of the daily CQC Report and in addressing follow-up questions that may arise.

8.4 PHOTOGRAPHS AND PHOTOGRAPH LOGS

The PQCM will maintain photographs and a photograph log to document site activities. Each photograph will have a date and time stamp on it or the photograph will show a sign board documenting the date and time clearly and legibly in the photograph. The photograph log will identify each photograph by date, time, location, and activity.

8.5 CONFERENCE NOTES AND CONFIRMATION NOTES

In addition to other required documentation, the PQCM is responsible for taking notes and preparing the reports of all conferences. Conference notes will be typed and the original report furnished to the DON within 5 days of the date of the conference for concurrence and subsequent distribution to all attendees. At a minimum, this report will include the following:

- Date and place the conference was held
- List of attendees, including name, organization, and telephone number
- Comments made during the conference and decisions affecting criteria changes
- Conference notes that augment the written comments

The PjM is also responsible for providing a record of all discussions, verbal directions, telephone conversations, and so forth in which TtEC personnel or their representatives participate on matters relating to this contract and work. These records, titled Confirmation Notices, will be numbered sequentially and will fully identify participating personnel, subject discussed, and any conclusions reached. The PjM or designated representative will forward a reproducible copy of the confirmation notices to the DON RPM and ROICC within 5 working days.

This page intentionally left blank.

9.0 CHANGE MANAGEMENT

This section describes the DCN and FCR, the two main vehicles to document project changes.

9.1 DESIGN CHANGE NOTICES

The following sections detail the identification, preparation, and review and approval process for DCNs.

9.1.1 Identification

Any member of the Project Team may identify the need for a change to the design specifications or drawings. The Project Team member will notify the Field Engineer, who will evaluate the request and initiate a DCN, if determined necessary.

9.1.2 Preparation

The Field Engineer will generate a DCN form (Appendix B) and submit it to the Design Engineer for review and disposition. The DCN will identify the specification requirements, the proposed change, and the reason for the change.

9.1.3 Review and Approval

The PjM, Project Superintendent, and PQCM will review and approve the DCN. It is the responsibility of the PjM to notify the DON for approval of the DCN prior to making any changes identified on the DCN.

9.1.4 Implementation of Approved DCNs

The Project Superintendent is responsible for the implementation of approved DCNs.

9.1.5 Records

Each approved DCN will be sequentially numbered as follows:

DCN-CTO X-YY

Where:

X is the task order number and YY is the DCN number, beginning with 01.

A DCN log shall be maintained by the PQCM that provides the DCN number, date of DCN, and brief description of contents.

Each DCN will be copied to all the management signatories, the Project Superintendent, PQCM, SHSS, and other personnel as deemed appropriate by the PjM.

Copies of the approved DCN should be posted or otherwise included in daily site briefings as appropriate to ensure that all site personnel are aware of the changes to the task order program. Copies of DCN will be issued to all holders of controlled copies. The DCNs will be required to be maintained with the controlled copy of the document that has been changed.

9.2 FIELD CHANGE REQUEST

Site personnel will document changes to the approved plans (except the design specifications and drawings) in the field through the FCR form (Appendix B). At a minimum, the following information will be documented in the FCR form:

- Project name
- CTO number
- FCR number
- Documents to which a change is requested (including revision number if applicable)
- Description of the item or condition for which the change is requested
- Reason for the change
- Recommended disposition
- Cost and schedule implication of the change, if any
- Approval of disciplines
- Approval of the PjM, Project Superintendent, PQCM, PESM, and QCPM and concurrence from the RPM or ROICC

9.3 DISTRIBUTION OF DCN AND FCR FORMS

Approved DCN and FCR forms will be distributed to the CTO file record, all CTO personnel that received the original document, and the ROICC and RPM. The DON may request DCNs or FCRs be submitted to the Contracting Officer or their designee.

10.0 NONCONFORMANCE

All deficiencies or nonconforming conditions discovered during inspections or other QC functions will be noted on either a DN or an NCR, as appropriate.

A DN is used to document the failure to develop, document, or implement effectively any applicable element of approved plans or to follow established procedures. A deficiency could lead to a nonconformance.

An NCR is used to document a nonconforming condition that renders the quality of an item, process, or product that has been defined in the specifications or drawings as unacceptable or indeterminate.

Copies of these forms are provided in Appendix B along with the logs used for tracking these documents. All deficiencies and nonconforming conditions will be resolved prior to completion of the project and in the timeliest manner possible. The DN will be used for all conditions that do not affect the final work product. An NCR will be used when a condition may affect the final work product.

The PQCM will be notified of all deficiencies and nonconforming conditions identified during the course of the field activities to ensure that each of these occurrences is documented, reported, and tracked; and that corrective actions are taken and follow-up verification is conducted.

The PQCM will also document deficiencies and nonconforming conditions in the daily CQC Report, noting the items found to be deficient or nonconforming; the date; time, and location; the person who identified the deficiency or nonconformance; and the status of the item to which the deficiency or nonconformance applies.

The PQCM will update the status of the deficiency when it changes. Before the work activities of the day begin, the PQCM will note the deficiencies or nonconforming conditions that require follow-up verification that day. New or changed status will be entered into the file at the end of each day. The daily CQC Report will document completion of the corrective action for each deficiency or nonconformance for that day. Nonconforming conditions or deficiencies that require rework for resolution will be noted on the Rework Items List included in Appendix B.

10.1 ROOT CAUSE ANALYSIS

The DN and the NCR forms both include space to enter information regarding the cause of the problem and the proposed resolution. The determination of the root cause of a deficiency or nonconformance is an integral part of the QC process. Root cause analysis will be made by the

PQCM in conjunction with other appropriate site personnel such as the Project Superintendent and the SHSO. Criteria considered in the analysis will include:

- Staff qualifications and training
- Adequacy of procedures and methods
- Adequacy of equipment
- Adequacy of QC measures

Input will be obtained, as necessary, from field staff and technical advisors in order to identify the factors that led to the problem.

10.2 CORRECTIVE ACTION

Following the root cause analysis, the PQCM will evaluate potential solutions (corrective actions) to determine which remedy is most effective in correcting the problem. This process will include all appropriate staff. Potential remedies considered will include:

- Supplemental staff training
- Changes of equipment or modification of equipment currently in use
- Acquisition of supplemental equipment
- Implementation of new procedures or modification of existing procedures
- Changes in QC procedures

Final approval of all remedies will be the responsibility of the PjM.

Successful implementation of corrective action will be documented by the PQCM in the appropriate areas of the DN or NCR. This documentation will be supported by changes to the inspection procedures or schedule as warranted (i.e., the PQCM will not certify that corrective action has been taken until inspection of the actions and the resulting changes in the program are complete).

10.3 CONDITION REQUIRING STOP WORK

If corrective actions are insufficient, resolution cannot be reached, or results of prior work are indeterminate, work may be stopped. The PQCM will direct the PjM to suspend work associated with the nonconformance until corrective action is complete. If there is a disagreement between the PQCM and the PjM, the difference will be brought to the attention of the QCPM until resolution is achieved.

The conditions of the suspension of work will be described in detail on the daily CQC Report and on the Rework Items List, if corrective action is not completed by the end of the working day. Work will not continue until directed by the individual who authorized it.

This page intentionally left blank.

11.0 QUALITY MANAGEMENT

In addition to the required QC field inspections, the TtEC Quality Program requires a quality management overview of the site QA/QC Program implementation. The PQCM will perform regular internal QC checks on the site implementation of the QA/QC Program. Reports of any deficiencies will be provided to the PjM for corrective action.

Inspections will be performed and checked for the following:

- Conformance with the Execution Plan and associated plans
- Thoroughness of performance
- Identification and completeness of documentation generated during performance

The PQCM will maintain the Rework Item List. This is a list of work items that do not comply with the contract and identify each item that needs rework, the date the item was discovered, the date the item will be corrected, and the date the item was corrected.

The PQCM will ensure that as-built drawings are kept current on a daily basis. The PQCM (or designee) will initial each revision. At the end of the project, updated as-built drawings will be submitted.

This page intentionally left blank.

12.0 REFERENCES

NAVFAC (Naval Facilities Engineering Command). 2009. Unified Facilities Guide Specifications (UFGS) 014502, Submittal Procedures. February.

TtEC (Tetra Tech EC, Inc.). 2011. Final Execution Plan, Basewide Radiological Support, Hunters Point Shipyard, San Francisco, California. January.

USACE (United States Army Corps of Engineers). 2008. Safety – Safety and Health Requirements. EM-385-1-1. September 15.

This page intentionally left blank.

TABLES

This page intentionally left blank.

TABLE 3-1

DEFINABLE FEATURES OF WORK

ACTIVITY	PREPARATORY	DONE	INITIAL	DONE	FOLLOW-UP	DONE
Environmental resources survey	• Review survey areas as identified in the Execution Plan and Design Plan. • Verify that RPM and NWB have been notified about the environmental survey. • Verify that ROICC and CSO have been notified. • Review AHAs. • Verify that a project kickoff meeting was held. • Verify that project kickoff meeting minutes were prepared, reviewed, and distributed. • Verify the qualifications of TtEC's Wildlife Biologist. • Verify that the biological resource requirements have been met. • Inspect record for radiation general awareness training for all workers.		• Inspect environmental survey documentation. • Verify that qualified SSHO are present at active work areas. • Verify that site activities are being photographed.		• Verify that environmental resource survey is conducted in all areas where field activities will take place and adjacent areas. • Verify that qualified SSHO is present at active work areas. • Verify that radiological survey is being conducted in accordance with the Base-wide Storm Drain and Sanitary Sewer Work Plan and Design Plan. • Verify that site activities are being photographed. • Verify that photographs are logged and stored.	
Clearing of vegetation and/or pavement	• Verify that RPM and CSO have been notified. • Verify that management of cleared vegetation and/or pavement protocol is established based on the results of vegetation survey. • Review AHAs. • Verify that PPE is available and meets requirements of the SSHP. • Verify that the area has been walked/visually inspected for items that could interfere with clearing (utilities, rebar, etc.). • Verify that radiation awareness training has been completed and that training is documented.		• Verify that qualified RCT and SSHO are present at active work areas. • Verify that vegetation and/or pavement is removed throughout the excavation area. • Verify that waste vegetation and/or pavement is being managed as required. • Verify that vegetation removed from radiologically impacted sites is stockpiled at the site of origin.		• Continue to inspect ongoing activities. • Verify that qualified RCT and SSHO are present at active work areas. • Verify that vegetation and/or pavement stockpiles are maintained per the Base-wide Storm Drain and Sanitary Sewer Work Plan, Basewide Dust Control Plan, and Design Plan requirements. • Verify that vegetation and/or pavement are disposed of in accordance with the Base-wide Storm Drain and Sanitary Sewer Work Plan requirements, and that the stockpile locations are cleaned up.	

TABLE 3-1

DEFINABLE FEATURES OF WORK

ACTIVITY	PREPARATORY	DONE	INITIAL	DONE	FOLLOW-UP	DONE
Clearing of vegetation and/or pavement (Continued)	• Verify that traffic schedule has been approved by CSO and ROICC.		• Verify that the activity is photographed.		• Verify that site activities are being photographed. • Verify that photographs are logged and stored.	
Geophysical survey	• Verify that RPM and CSO have been notified. • Verify that survey instrument certification is current and in good condition. • Verify that sensitive locations at the site are delineated and work crews are aware of restricted areas. • Review control points. • Review AHAs. • Review the Execution Plan and Design Plan and drawings for this activity. • Review boundaries and extent of survey. • Verify that radiation awareness training has been completed and training is documented. • Verify that designated personnel have assigned dosimeters and completed NRC Form 4.		• Verify that qualified RCT and SSHO are present at active work areas. • Verify that surveyor has correct control point information. • Verify that the geophysical survey is performed over areas of known or suspected subsurface utilities. • Verify boundaries and extent of survey. • Verify that site activities are being photographed.		• Verify that qualified RCT and SSHO are present at active work areas. • Verify that utility locations are marked in the field and identified to the equipment operators. • Verify that boundaries of survey have been met. • Verify that site activities are being photographed. • Verify that photographs are logged and stored.	
Radiological surveys	• Verify that RPM, RASO, and CSO have been notified. • Verify that an approved RWP is available and has been read and signed by assigned personnel. • Verify that Base-wide Storm Drain and Sanitary Sewer Work Plan/Base-wide Radiological Work Plan, TSPs, Design Plan, and AHAs have been reviewed. • Verify that assigned personnel are trained and qualified.		• Verify that radiological instruments are as specified in the Base-wide Storm Drain and Sanitary Sewer Work Plan/Base-wide Radiological Work Plan, TSPs, and Design Plan. • Verify that qualified RCT and SSHO are present at active work areas. • Verify that site activities are being photographed.		• Verify that site is properly posted and secured, if necessary. • Conduct ongoing inspection of material and equipment. • Verify that qualified RCT and SSHO are present at active work areas. • Verify that required dosimetry is being worn. • Verify that any suspected material location is marked, flagged, and documented.	

TABLE 3-1

DEFINABLE FEATURES OF WORK

ACTIVITY	PREPARATORY	DONE	INITIAL	DONE	FOLLOW-UP	DONE
Radiological surveys (Continued)	• Verify that training record documentation is being maintained. • Verify that personnel have been given an emergency notification procedure. • Verify that workers assigned dosimetry have completed NRC Form 4. • Verify that relevant SOPs and/or manufacturers' instructions are available and have been reviewed for equipment to be used for radiological surveys. • Verify that limits and boundaries of surveys have been established and are understood. • Verify background check. • Verify that calibration of survey instrument is within 1 year. • Verify that equipment is on-site. • Verify that traffic schedule has been approved by CSO.		• Verify that the reference area measurements have been obtained using the procedure described in the Base-wide Storm Drain and Sanitary Sewer Work Plan/Base-wide Radiological Work Plan, and TSPs. • Verify that daily checks are performed on all portable survey instruments. • Verify that required dosimetry is being worn. • Verify that RWP is available at work site. • Verify that field logbooks and proper forms are in use. • Verify that measurements are being collected in accordance with the Base-wide Storm Drain and Sanitary Sewer Work Plan/ Base-wide Radiological Work Plan, TSPs, Design Plan, SAP, and relevant SOPs. Verify that limits and boundaries of survey are being met.		• Verify that daily instrument checks and background measurements are obtained and documented. • Verify that survey results are documented. • Verify that RWP is available at work site. • Verify that personnel have read and signed the revised RWP, if revision is required. • Verify that survey data and sample analysis results are reviewed as required by the SOPs. • Verify that survey activities conform to the Base-wide Storm Drain and Sanitary Sewer Work Plan/Base-wide Radiological Work Plan, TSPs, and SOPs. • Verify that boundaries of the survey have been met. • Verify that survey instrument is recalibrated after repairs or modifications. • Verify that personnel surveys are performed for all personnel leaving a radiological controlled area. • Verify that RASO is notified of discovered radioactive material. • Verify that area known or suspected to contain radioactive material is isolated. • Verify that site activities are being photographed.	

TABLE 3-1

DEFINABLE FEATURES OF WORK

ACTIVITY	PREPARATORY	DONE	INITIAL	DONE	FOLLOW-UP	DONE
Radiological surveys (Continued)					• Verify that photographs are logged and stored.	
Identification and removal of radioactive material	• Verify that RPM, CSO, and RASO have been notified. • Review procedures. Verify background activity and what constitutes a deviation. • Review AHAs. • Verify that equipment, instruments, and materials are on-site, calibrated, and in working order. • Verify that required stockpile and staging areas are established. • Review the Base-wide Storm Drain and Sanitary Sewer Work Plan/Base-wide Radiological Work Plan, TSPs, and RPP. • Verify that PPE is available and meets requirements of the SSHP. • Verify that radiation awareness training has been completed and training is documented. • Verify that designated personnel have assigned dosimeters and completed NRC Form 4. • Verify that a log and database are established for identified material. • Verify that traffic schedule has been approved by CSO. • Verify that personnel have been given an emergency notification procedure.		• Verify that qualified RCT and SSHO are present at active work areas. • Verify that required dosimetry is being worn. • Verify PPE of all workers. • Verify that RTM has evaluated radiological impact of the material prior to any action for each material. • Verify that radiological safety instruction specific to each material has been reviewed by RCT and RTM. • Verify that RCT is present during removal of any source. • Verify that a surface survey is completed for the initial surface area and each subsequent 1-foot excavation. • Verify that all boxes and drums have been surveyed and surface radiation measurements are collected. • Verify that site activities are being photographed. • Verify that proper logging, recording, and photography of found point sources are being done.		• Verify that qualified RCT and SSHO are present at active work areas. • Verify that required dosimetry is being worn. • Verify that removal of radioactive material is conducted in accordance with the procedures and project plans. • Verify that an additional 1 foot of soil in every direction is excavated after removal of material. • Verify that RCT scanned the excavated area after radioactive material removal. • Verify that personnel surveys are performed for all personnel leaving a radiological controlled area. • Review radiological logbook for completeness of documentation. • Inspect contaminated material handling procedure. • Verify that removed point source has unique identification, documented in the logbook and the drum inventory sheet. • Verify that removed point source storage and management procedure is in accordance with the Base-wide Storm Drain and Sanitary Sewer Work Plan/Base-wide Radiological Work Plan, and RPP.	

TABLE 3-1

DEFINABLE FEATURES OF WORK

ACTIVITY	PREPARATORY	DONE	INITIAL	DONE	FOLLOW-UP	DONE
Identification and removal of radioactive material (Continued)			• Verify that traffic schedule has been approved by CSO.		• Verify that all bags and drums are marked with a unique identification and information is recorded in the logbook. • Verify that filled drums are stored in approved storage areas. • Verify that liner remains in good condition. • Verify that the log of radioactive material is routinely reviewed by the CHP. • Verify that traffic schedule has been approved by CSO. • Verify that site activities are being photographed. • Verify that photographs are logged and stored.	
Excavation and removal of soil/piping	• Verify that the RPM and CSO have been notified. • Verify that Cal-OSHA has been notified 5 days prior to excavation. • Verify that USA has been notified 72 hours prior to excavation. • Verify that an assignment letter for competent person is on file. • Verify that training requirements are met for all personnel. • Verify that OSHA excavation permit is on-site. • Verify that OSHA excavation regulations are reviewed. • Verify that equipment and material are surveyed for radiation and survey results are documented.		• Verify that the RCT and SSHO are present in an active work area. • Verify that a spotter trained in recognizing underground utilities is present at all times. • Verify that airborne concentrations do not exceed the established levels. • Verify that air monitoring and initial baseline sampling are being performed per SSHP. • Verify that required dosimetry is being worn. • Verify that all personnel have signed the RWP(s).		• Verify that RCT and SSHO are present in an active work area. • Verify that a spotter trained in recognizing underground utilities is present at all times. • Verify that airborne concentrations do not exceed the established levels. • Verify that air and soil samples are collected as required. • Verify that trenching excavation is performed in accordance with the project plans and specifications. • Verify that pipeline draining is performed in accordance with the work plans and specifications.	

TABLE 3-1

DEFINABLE FEATURES OF WORK

ACTIVITY	PREPARATORY	DONE	INITIAL	DONE	FOLLOW-UP	DONE
Excavation and removal of soil/piping (Continued)	• Verify that final excavation configurations have been reviewed with the DON and regulators. • Verify that initial background air sampling has been conducted. • Verify that electrical lines are de-energized, if necessary. • Verify that existing utilities and structures are removed, if necessary. • Verify that proper equipment is on-site to perform work. • Review the Execution Plan, Base-wide Storm Drain and Sanitary Sewer Work Plan, and Design Plan. • Review the AHAs. • Verify that PPE is available and meets the requirements of the SSHP. • Verify that radiation awareness training has been completed and documented. • Verify that all personnel have assigned dosimeters and completed the NRC Form 4. • Verify that the RWP is in place and that all workers have read the requirements. • Verify that the Traffic Control Plan is in place and reviewed. • Verify that traffic schedule has been approved by the CSO.		• Verify that the excavation protocol, as described in the Execution Plan, Base-wide Storm Drain and Sanitary Sewer Work Plan, and Design Plan, is being followed. • Verify that dust control is used as necessary. • Verify that site activities are being photographed. • Verify that permit conditions are followed. • Verify sediment control per the SWPPP. • Verify that traffic control procedures are being followed.		• Verify that swipe samples are collected from each 10-foot section of removed piping. • Verify that solid samples are collected if material is found to be present within the removed section of pipe. • Verify that open sewer or storm drain lines, temporarily left in place during the removal process, are plugged as described in the project plans. • Verify that pipeline closures are performed in accordance with the work plans and specifications. • Verify that required dosimetry is being worn. • Verify that daily safety briefings discuss status of RWP(s). • Verify that RWP is available at the work location. • Verify that RWP is modified in the event of changes to the conditions. • Verify that modified RWP was concurred with by RASO and concurrence is documented. • Verify that tools, material, and equipment are cleaned, wiped down, and surveyed prior to removal. • Verify that excavation protocol, as described in the Base-wide Storm Drain and Sanitary Sewer Work Plan, Execution Plan, and Design Plan, is being followed. • Verify that visually stained soil/material is segregated.	

TABLE 3-1

DEFINABLE FEATURES OF WORK

ACTIVITY	PREPARATORY	DONE	INITIAL	DONE	FOLLOW-UP	DONE
Excavation and removal of soil/piping (Continued)					• Verify that competent person is conducting daily inspection of the excavation and slope stability, and that the inspection is documented in a logbook. • Continue to inspect ongoing work. • Verify sediment control per the SWPPP. • Verify that personnel surveys are performed for all personnel leaving a radiological controlled area. • Verify that site activities are being photographed. • Verify that photographs are logged and stored. • Verify that traffic control procedures are being followed.	
Final Status Survey (including systematic and biased sampling)	• Verify that RPM and CSO have been notified. • Review the TSP, Base-wide Radiological Work Plan, and SAP. • Verify that radiation awareness training has been completed and training is documented. • Verify that designated personnel have assigned dosimeters and completed the NRC Form 4. • Verify that PPE is available.		• Verify that RCT and SSHO are present in an active work area. • Verify that required dosimetry is being worn. • Review sample handling procedures.		• Verify that RCT and SSHO are present in an active work area. • Verify that required dosimetry is being worn. • Verify that samples are collected in accordance with the sample handling procedures. • Inspect field documentation. • Verify that personnel surveys are performed for all personnel leaving the radiological controlled area. • Verify that site activities are being photographed.	

TABLE 3-1

DEFINABLE FEATURES OF WORK

ACTIVITY	PREPARATORY	DONE	INITIAL	DONE	FOLLOW-UP	DONE
Final Status Survey. (including systematic and biased sampling) (Continued)					• Verify that photographs are logged and stored. • Verify that sample locations are surveyed. • Verify sample chain-of-custody form.	
Backfill placement and compaction	• Verify that RPM and CSO have been notified. • Verify that compaction equipment is available. • Review the Execution Plan and Design Plan and verify that adequate material is available for fill. • Verify that site has been surveyed prior to backfill. • Review AHAs. • Review the Execution Plan and Design Plan. • Verify that PPE is available and meets requirements of SSHP. • Verify that radiation awareness training has been completed and that training is documented. • Verify that designated personnel have assigned dosimeters and completed NRC Form 4.		• Verify that RCT and SSHO are present in an active work area. • Verify that required dosimetry is being worn. • Verify that samples of proposed materials have been submitted and approved.		• Conduct ongoing inspection of backfilling and compaction operation. • Verify that backfill placement and compaction are completed in accordance with the plans and specifications. • Verify that site activities are being photographed. • Verify that photographs are logged and stored.	
Demolition of former Building 529 vault	• Verify that the RPM, CSO, ROICC, HPS security and HPS Fire Department have been notified. • Verify that demolition work procedure, schedule, names, and telephone numbers of responsible project staff have been given to the RPM, CSO, HPS security and the HPS Fire Department.		• Inspect demolition activities. • Inspect dust control. • Verify that site activities are being photographed. • Inspect traffic control activities. • Verify work zone has been established.		• Continue inspection of demolition activities. • Verify that site activities are being photographed. • Inspect traffic control activities. • Verify work zone has been established • Verify that air monitoring data are being collected in accordance with the plan.	

TABLE 3-1

DEFINABLE FEATURES OF WORK

ACTIVITY	PREPARATORY	DONE	INITIAL	DONE	FOLLOW-UP	DONE
Demolition of former Building 529 vault (Continued)	• Review requirements for establishing work zone. • Review work procedure, SSHP, and AHA(s). • Review dust control procedure. • Review stockpiling procedure. • Review demolition safety procedure. • Review traffic control procedure.		• Verify that air monitoring data are being collected in accordance with the plans. • Verify that demolition safety procedure is being followed. • Verify field documentation requirements.		• Verify that demolition safety procedure is being followed. • Verify that equipment and tool decontamination is conducted prior to demobilization. • Inspect field documentation.	
Asbestos Abatement (Buildings 500 and 521)	• Verify that RPM and CSO have been notified. • Review the Contractor Asbestos Abatement Plan, including the AHAs. • Verify that radiation awareness training has been completed and training is documented. • Verify that designated personnel have assigned dosimeters and completed the NRC Form 4. • Verify that PPE is available and meets the requirements of the Contractor Asbestos Abatement Plan. • Verify that the RWP is in place and that all workers have read the requirements.		• Verify that RCT and the asbestos abatement contractor are present in an active work area. • Verify that required dosimetry is being worn. • Verify that air monitoring is being performed in accordance with the Contractor Asbestos Abatement Plan. • Verify that all personnel have signed the RWP(s). • Verify that the abatement activities are performed in accordance with the Contractor Asbestos Abatement Plan.		• Verify that RCT and the Asbestos Abatement contractor are present in an active work area. • Verify that required dosimetry is being worn. • Verify that daily safety briefings discuss status of RWP(s). • Verify that RWP is available at the work location. • Verify that RWP is modified in the event of changes to the conditions. • Verify that modified RWP was concurred with by RASO and concurrence is documented. • Verify that tools, material, and equipment are cleaned, wiped down, and surveyed prior to removal. • Verify that air monitoring is being performed in accordance with the Contractor Asbestos Abatement Plan. • Verify that the abatement activities are performed in accordance with the Contractor Asbestos Abatement Plan. • Inspect field documentation.	

TABLE 3-1

DEFINABLE FEATURES OF WORK

ACTIVITY	PREPARATORY	DONE	INITIAL	DONE	FOLLOW-UP	DONE
Asbestos Abatement (Buildings 500 and 521) (Continued)					• Verify that personnel surveys are performed for all personnel leaving the radiological controlled area.	
Site restoration	• Verify that RPM and CSO have been notified. • Review AHAs. • Verify that PPE is available and meets requirements of the SSHP. • Review site restoration activities and procedure.		• Verify that site demobilization procedures have concurrence from RPM and CSO. • Inspect site restoration activities. • Verify that site activities are being photographed (before/after photographs).		• Conduct ongoing inspection of site restoration activities. • Verify that site activities are being photographed. • Verify that photographs are logged and stored. • Verify that radiological survey is being conducted in accordance with the TSP, Base-wide Radiological Work Plan, and SAP. • Verify that construction-related damages are repaired.	

Abbreviations and Acronyms:

AHA – Activity Hazard Analysis
Cal-OSHA – California Occupational Safety and Health Administration
CHP – Certified Health Physicist
CSO – Caretaker Site Office
DON – Department of the Navy
HPS – Hunters Point Shipyard
NRC – Nuclear Regulatory Commission
NWB – Navy Wildlife Biologist
OSHA – Occupational Safety and Health Administration
PPE – personal protective equipment
RASO – Radiological Affairs Support Office
RCT – Radiological Control Technician
ROICC – Resident Officer in Charge of Construction
RPM – Remedial Project Manager
RPP – Radiation Protection Plan
RTM – Radiological Task Manager

TABLE 3-1

DEFINABLE FEATURES OF WORK

RWP – Radiation Work Permit
SAP – Sampling and Analysis Plan
SOP – Standard Operating Procedure
SSHO – Site Safety and Health Officer
SSHP – Site Safety and Health Plan
SWPPP – Stormwater Pollution Prevention Plan
TSP – Task-specific Plan
TtEC – Tetra Tech EC, Inc.
USA – Underground Service Alert

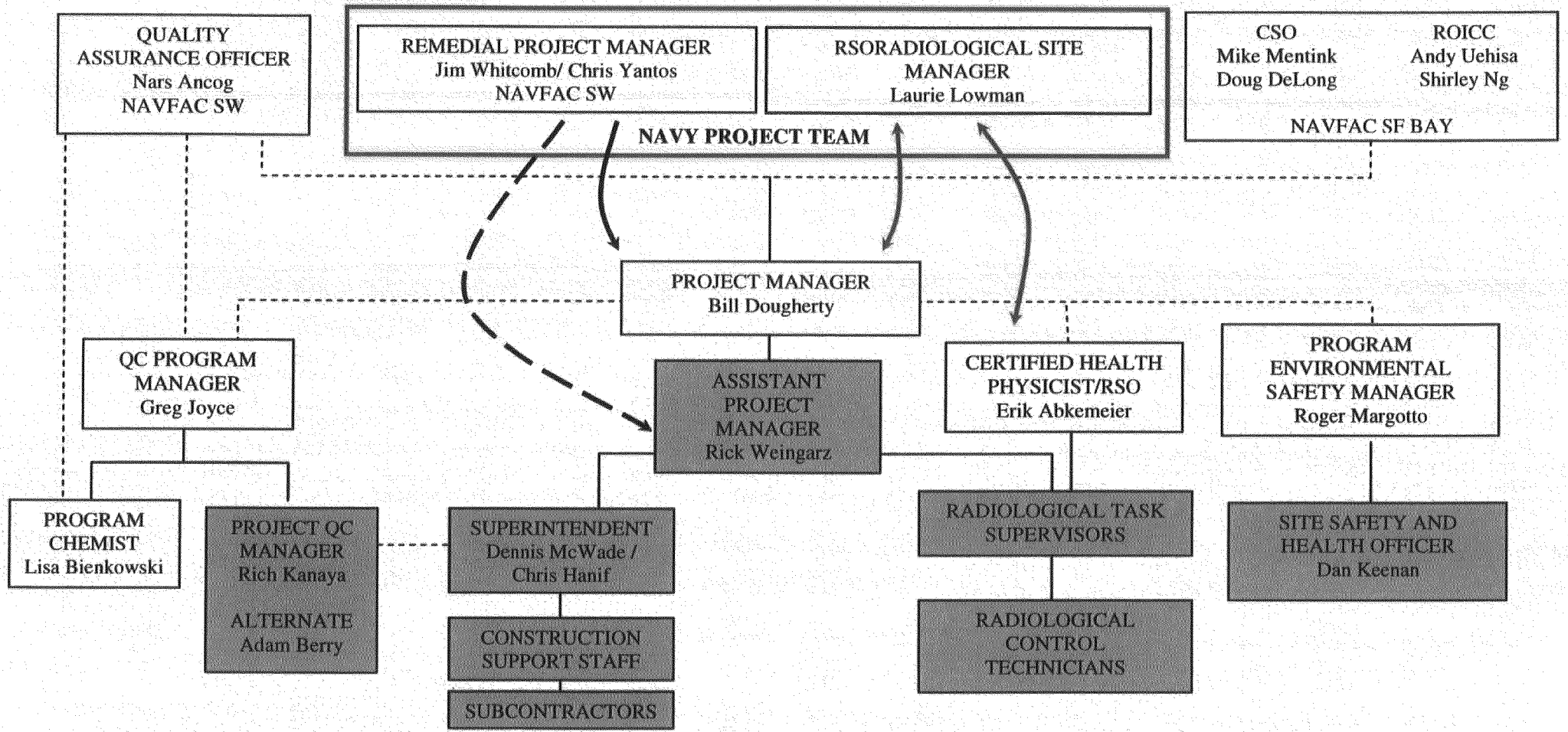
This page intentionally left blank.

FIGURES

This page intentionally left blank.

FIGURE 2-1

PROJECT ORGANIZATION CHART



Legend

- Formal reporting relationship
- Supporting relationship
- Primary lines of technical communication
- Line of technical direction (alternate where dashed)

Abbreviations and Acronyms:
CSO – Caretaker Site Office
HPS – Hunters Point Shipyard
NAVFAC SW – Naval Facilities Engineering Command Southwest
QC – Quality Control
RASO – Radiological Affairs Support Office
ROICC – Resident Officer in Charge of Construction
RSO – Radiation Safety Officer

Staff in shaded boxes are on-site at HPS and responsible for field implementation of activities under the Work Plan.

The Construction Manager (Jeff Bray) has overall responsibility for coordinating the activities of on-site technical staff.

APPENDIX A

DELEGATION OF AUTHORITY LETTERS

AND RESUMES

This page intentionally left blank.

TETRA TECH EC, INC.

August 16, 2010

Mr. Richard Kanaya
Tetra Tech EC, Inc.
1230 Columbia St., Suite 750
San Diego, CA 92101

Subject: **Project Quality Control Manager**

Reference: Program Construction Quality Control Management Plan, March 11, 2010, Radiological Environmental Multi-award Contract (RAD EMAC), Contract Task Orders (CTOs) at Hunters Point Shipyard, San Francisco, California

Dear Mr. Kanaya:

In accordance with the RAD EMAC Program Construction Quality Control Management Plan, March 11, 2010, this letter notifies you of your appointment as the Project Quality Control Manager for CTOs at Hunters Point Shipyard, San Francisco, California issued under the above contract as directed by the Program QC Manager.

As the designated Project Quality Control Manager, you will be responsible for managing the site-specific quality control requirements in accordance with the approved plan. You will be responsible for conducting quality control meetings, performing the three phases of control, and performing submittal review. You will be required to be present during all field activities to ensure that any testing is conducted in accordance with approved plans. In addition, you will be required to prepare the necessary quality control certification and documentation.

You have the authority and responsibility for suspending work when conditions adverse to quality are identified and for directing the correction of all nonconforming work.

This letter is effective immediately until modified by the Quality Control Program Manager with concurrence of the TtEC Project Manager, the NAVFAC SW Remedial Project Manager, and the Resident Officer in Charge of Construction.

Sincerely,

Tetra Tech EC, Inc.

Gregory D Joyce

Gregory D Joyce, ASQ CQM
Quality Control Program Manager

cc: Bill Dougherty
Richard Kanaya

1230 Columbia Street, Suite 750, San Diego, CA 92101
Tel 619.234.8690 Fax 619.234.8591
www.tteci.com

EXPERIENCE SUMMARY

Worked 13 months at Hunters Point Shipyard, serving as a quality engineer/inspector, project manager assistant, project engineer/back-up superintendent and as the Project Quality Control Manager. QC responsibilities have included: performing surveillances and inspections; audits; record keeping; photographing activities; generating daily reports; leading and assisting quality investigations; processing FCR's, leading Preparatory and Initial Phase meetings, facilitating CQC Meetings and staff meetings, managing staff and creating the quality program for Hunters Point Shipyard. PM Assistant responsibilities have included generating: the Hunters Point Shipyard TCRA report, the Base Closure Team Presentation (PowerPoint), the CTO-72 Monthly Progress Report, CTO-72 Weekly Progress Reports, tracking inventory, providing support to the Wetlands Mitigation Project at MSA, providing support to the sand monitoring project at MDR and attending various client meetings. Project Engineer and superintendent responsibilities have included generating daily engineering reports, providing site data for management or clients (Navy), providing guidance to construction crew, leading safety meetings and facilitating sites when necessary. Became Hunters Point PQCM in January 2007 and performed all duties as described below, as well as continuing those of Project Manager Assistant and Field Engineer. In April 2007, became Radiological Screening Yard Manager; responsibilities included coordinating subcontractor activities (taking soil samples, scanning soil filled pads for radioactive contamination, COC tracking, remediating contaminated pads/filling intermodels/roll-off bins with Low Level Radioactive Waste, decontaminating equipment/vehicles) providing oversight for craft personnel (supervising and training operating engineers and laborers performing soil movement activities in the RSY relative to MARSSIM standards) and performing quality control checks on RSY activities. In March 2008, resumed the position of Project Quality Control Manager.

EDUCATION

Christian Leadership, San Jose Christian College, 2000
Financial Accounting, San Diego State University, 1989
Certificate, General Education, College of San Mateo, 1988

REGISTRATIONS/CERTIFICATIONS

Certified Nuclear Gauge Operator, CA, Number 2777-01, Earned 4/8/99

TRAINING

40-Hour OSHA Hazardous Waste Health and Safety Training – 2006
Radiation Safety for Hazardous Material Workers – 2006
Construction Quality Management For Contractors – 2006
American Red Cross Standard First Aid – 2006
American Red Cross Adult CPR – 2006
TtEC Superintendents' Training – 2007
8-Hour Hazwoper Refresher Training – 2007
Confined Space Supervisor's Training – 2007
Defensive Driving Certification – 2007
Loss Control Certification – 2007
HIPAA Training – 2007

CORPORATION PROJECT EXPERIENCE

Quality Engineer/Inspector, March 2006 – November 2006
Department of the Navy, Hunters Point Shipyard, San Francisco, CA
Quality Engineer responsible for quality control of Metal Debris Reef And Metal Slag Area (time critical removal action to remove metal slag and debris associated with radiological contamination, and to address any non-radiological chemical contamination incidental to the removal, and to restore the sites),

Building 813 Characterization Survey (survey to assess if residual radioactivity above the established release criteria is present in the area) and Building 142 Scoping Survey (survey to determine if residual radioactivity is present at this site).

Led investigation as requested by Client (Navy) into device with elevated readings being detected at the portal monitor in a truck exiting site. Interviewed over 40 individuals, from management to craft/labor; inspected related equipment (conveyor belt systems, with radiation detector arrays) and generated a report with recommendations to assist in preventing incident from occurring again. The client was satisfied with the findings, report and recommendations and allowed soil processing activities to resume at sites using conveyor belt systems, upon implementation of recommendations.

Generated and performed surveillances; performed SWPPP Inspections, audits, photo documentation, and supported QIR investigations as required by the project.

Project Manager Assistant, June 2006 – December 2006
Department of the Navy, Hunters Point Shipyard, San Francisco, CA
Responsibilities included movement of infrastructure from Contract Task Order (72) to Contract Task Order (06). Attended staff, client and contractor meetings. Helped facilitate progress of Metal Slag Area Wetlands Mitigation Plan. Generated progress reports for CTO-72 and put together Base Closure Team PowerPoint Presentations and Weekly TCRA Excavation Summaries for Client. Performed assorted administrative duties.

Project Engineer, June 2006 – December 2006
Department of the Navy, Hunters Point Shipyard, San Francisco, CA
Responsibilities included generating daily progress reports and facilitated sites during weekly superintendent home leaves or whenever necessary. Tracked project progress and documented daily production data, including soil volume processed and where it was staged.

Project Quality Control Manager, January 2007 – April 2007
Department of the Navy, Hunters Point Shipyard, San Francisco, CA
PQCM is responsible for overall management of project QC and will report to the QCM (Quality Control Program Manager). The PQCM will be on-site at all times during field activities.

Responsibilities included: monitoring activities to ensure conformance with the Base-wide Plan and that policies, procedures, contract specifications, and sound practices are followed; preparing Daily QC Reports, Ensuring that the three phases of inspection (preparatory, initial and follow-up) are implemented for all the definable features of work; ensuring that required tests and inspections are performed and the results reported; facilitating weekly QC meeting; attending required meetings (including the pre-construction conference, pre- and post-construction site inspections and other scheduled and unscheduled meetings; issuing and maintaining Field Change Requests and Nonconformance Reports for project activities; maintaining and NCR and FCR log; ensuring that planning documents are current and controlled; maintaining the Submittal Register and a Submittal Log; stopping work that is not in compliance with the contract.

Organized and moderated CQC Meetings. Developed checklists and surveillances for critical activities for CTO-06 & TO-70—provided oversight for their implementation. Scope of project work activities were to perform remediation of radiologically impacted sewer and storm drain piping components. This process involved the excavation, surveying and disposal of piping components and excavated material.

Radiological Screening Yard Manager, April 2007 – March 2008
Department of the Navy, Hunters Point Shipyard, San Francisco, CA
Provided oversight for the handling of excavated soil being removed above and around piping components, potentially contaminated with low level radioactive waste. Tracked the status of excavated material from excavation to backfill or disposal, overseeing lay down, surveying, sampling, remediation and off-haul. Responsibilities included development of field checklists for critical activities in the yard and helping craft personnel understand the specifications for compliance under MARSSIM. Coordinated yard activities, including: filling, scanning, sampling, remediating and clearing of excavated soil placed on lay down pads. Acted as field engineer when necessary, marking pad areas to be sampled or remediated and then tracking and documenting material volume as it's removed and disposed. Worked closely with all levels of craft, as well as subcontractors to insure job quality. Trained project personnel from Alameda Naval Air Station (Nathan Smith, Rad Supervisor and Bob Wells, Site Superintendent) to familiarize them with RSY operations for their project. Managed the RSY for CTO-06 and TO-70.

Project Quality Control Manager, March 2008 – Present
Department of the Navy, Hunters Point Shipyard, San Francisco, CA
PQCM is responsible for overall management of project QC and will report to the QCM (Quality Control Program Manager). The PQCM will be on-site at all times during field activities.

Responsibilities include: monitoring activities to ensure conformance with the Base-wide Plan and that policies, procedures, contract specifications, and sound practices are followed; prepare Daily QC Reports, ensure that the three phases of inspection (preparatory, initial and follow-up) are implemented for the definable features of work; ensure that required tests and inspections are performed and the results reported; facilitate weekly QC meeting; attend required meetings (including the pre-construction conference, pre- and post-construction site inspections and other scheduled and unscheduled meetings; issue and maintain Field Change Requests and Nonconformance Reports for project activities; maintain an NCR and FCR log; ensure that planning documents are current and controlled; maintain the Submittal Register and a Submittal Log; stop work that is not in compliance with the contract.

Organize and moderate CQC Meetings. Developed checklists and surveillances for critical activities for CTO-06, TO-70, CTO-72X and the EMAC—provided oversight for their implementation. Developed correction notice system of accountability; implemented it in the field to reduce errors and mistakes. Mentored new QC staff personnel; demonstrated effective use of deficiency notices for project quality. Scope of project work activities were to perform remediation of radiologically impacted sewer and storm drain piping components and the surveying and remediation of impacted buildings. The sewer and storm drain projects involved the excavation, surveying, sampling and disposal of piping components & excavated material. The building surveys and remediation involved: radiological scanning; sampling; demolition; soil, asbestos and structural remediation; and stage by stage mapping & documentation.

PREVIOUS EXPERIENCE

Public Works Inspection Consultant, March 1999 – June 2003
City of Newark
Assignments included inspection of nationwide fiber optic installations passing through the city (directional boring and open trenching) city wide pipeline installations, multiple trenching and backfill projects and assorted paving and concrete projects.

Responsibilities included: attendance of pre-job, daily, weekly, and project closing meetings; inspection of projects to insure compliance with all City/CalTrans specifications, as well as supporting other public agencies in specification compliance; detailed documentation of job progress, accidents, complaints and

comments; punch list generation and inspection to completion, insuring any/all facilities affected by the project are restored to as good or better than pre-existing conditions. Performed trench backfill inspection and testing using a nuclear gauge. Enforced approved traffic control plans, erosion control measures and inspected and closed an assortment of utility permits. Established and maintained working relationships with contractors, developers, utilities, business owners and residents to foster open communication, to insure job progress and completion.

Vickers Concrete Sawing, Technician, 1998 - 1999
Responsibilities included core drilling, concrete demolition, estimating, sales, admin., and customer service.

Metals Technician, 1997 – 1998
Endovascular Technologies/Guidant Corporation
Primary responsibility was supporting laser welding, testing and design of elgiloy metal frames in a controlled environment room, for medical devices to treat abdominal aortic aneurisms. Performed laser welding, elgiloy frame fabrication, quality testing, quality control, document control, operator training and data entry.

Lab Technician, 1989 -1997
Bear Testing Lab
Responsibilities included testing & inspecting construction materials and collecting field data for engineering reports. Performed: concrete demolition for rebar studies/inspections; various concrete anchor pull tests for earthquake retrofit projects; core drilling for samples; testing on concrete/asphalt samples; testing on weld samples; masonry sheer wall tests on existing structures; friction tests; and documentation for tasks performed. Clients included The San Francisco-Moscone Convention Center, San Francisco International Airport, The Clorox Corp., Stanford University, The Nikko Hotel and others.

1978 – 1988
Kanaya Construction Inc.
Worked as laborer, carpenter, superintendent, bid representative, etc…for family owned general contracting firm, specializing in commercial and industrial concrete building construction.

Associate Pastor, 1998 – 2001
Pathway Community Church
Responsibilities included sermons, men's support groups, youth ministry & mentoring, marriage & family counseling, officiating weddings, funerals and assorted services.

Youth Pastor, 1988 – 1994
Sturge Presbyterian Church,
Responsibilities included sermons, young adult/college/high school/jr. high ministry, staffing and training personnel for youth programs, youth counseling and mentoring.

PUBLICATIONS & PRESENTATIONS

PROFESSIONAL ACCOMPLISHMENTS

PROFESSIONAL AFFILIATIONS

American Society for Quality-Member

DISCIPLINE CODES

02 Administrative, N
16 Construction Manager, N
15 Construction Inspector, Y
Technician/Field Supervisor, N

SKILL SET

Community Relations
Community Survey
Compliance Monitoring
Erosion Control
Field Sampling
Sampling - Soil
Low Level Radioactive Waste
Sediment Control
Soils
Storm Water

TECHNICAL EXPERTISE

LANGUAGE SKILLS

Knowledge Level:

PROFESSIONAL REFERENCES

Bill Dougherty, RMPM/CSQ, TtEC, 415-216-2731, Bill.Dougherty@tteci.com
Greg Joyce, Quality Control Program Manager, TtEC, 360-780-0371, Greg.Joyce@tteci.com
Gerard Slattery, PG, RMPM/CSQ, TtEC, 415-862-1689, Gerard.L.Slattery@usace.army.mil
Phil Bartley, CIH CSP, VP Environmental Safety and Quality Services, 509-732-5818, Philip.Bartley@tteci.com
Jamshid Sadeghipour, RMPM/CSQ, TtEC, 949-756-7519, Jamshid.Sadeghipour@tteci.com
Ajay Kurup, Public Works Inspector Supervisor, City of Newark, 510-790-7260, jay.kurup@newark.org
Soren Fajeau, P.E., Associate Civil Engineer, City of Newark, 510-790-7243, Soren.Fajeau@newark.org
Kevin Jow, Manufacturing Engineer, Guidant Corp., 650-903-1106, kjow@guidant.com
Neal Kanaya, Civil Engineer/Principal, Bear Testing Lab, 650-964-1107, office@beartest.com

RELATED COMPANY INFORMATION

Payroll Number: 519641
Employment Status: Full
Preferred First Name: Rich
Office Location:
Hire Date: 3/13/06
Years with Other Firms: 24
Years with Current Firm: 2
Total Years Experience: 26
Supervisor: Gregory D. Joyce, Program Quality Control Manager
Office Phone: (415) 216-2759
Cell Phone: (415) 516-9583
Fax: (415) 671-1995
E-mail Address: rich.kanaya@tteci.com
Other E-mail Address (if any): richard_kanaya@hotmail.com
Resume Last Revised: 2008-10-17

NAVAL FACILITIES ENGINEERING COMMAND SOUTHWEST

NAVFAC

PRESENTS THIS CERTIFICATE TO

Richard Kanaya

WHO HAS SUCCESSFULLY COMPLETED

U.S.A.C.E. Construction Quality Management for Contractors

GIVEN AT
AGC, San Diego Chapter, Inc.

CQM Facilitator
Kugan Panchadsaram

Date
April 11th & 12th, 2006

CQM Facilitator
Glen Schaffer

This certificate is valid for 5 years

TETRA TECH EC, INC.

October 11, 2010

Mr. Adam Berry
Tetra Tech EC, Inc.
1230 Columbia St. , Suite 750
San Diego, CA. 92101

Subject: **Alternate Project Quality Control Manager**

Reference: Program Construction Quality Control Management Plan, March 11, 2010, Radiological Environmental Multi-award Contract (RAD EMAC), Contract Task Orders (CTOs) at Hunters Point Shipyard, San Francisco, California

Dear Mr. Berry:

In accordance with the RAD EMAC Program Construction Quality Control Management Plan, March 11, 2010, this letter notifies you of your appointment as the Alternate Project Quality Control Manager for CTOs at Hunters Point Shipyard, San Francisco, California issued under the above contract as directed by the Program QC Manager.

As the designated Alternate Project Quality Control Manager, you will be responsible for managing the site-specific quality control requirements in accordance with the approved plan as directed by the Quality Control Program Manager, when Mr. Richard Kanaya is not available. You will be responsible for conducting quality control meetings, performing the three phases of control, and performing submittal review. You will be required to be present during all field activities to ensure that any testing is conducted in accordance with approved plans, if Mr. Kanaya cannot perform these functions. In addition, you will be required to prepare the necessary quality control certification and documentation.

You have the authority and responsibility for suspending work when conditions adverse to quality are identified and for directing the correction of all nonconforming work.

This letter is effective immediately until modified by the Quality Control Program Manager with concurrence of the TtEC Project Manager, the NAVFAC SW Remedial Project Manager, and the Resident Officer in Charge of Construction.

Sincerely,

Tetra Tech EC, Inc.

Gregory D Joyce

Gregory D Joyce, ASQ CQM
Quality Control Program Manager

cc: Bill Dougherty
Richard Kanaya

1230 Columbia Street, Suite 750, San Diego, CA 92101
Tel 619.234.8690 Fax 619.234.8591
www.tteci.com

Mobile: (713) 410-7928 Fax: (530) 272-2241
E-mail: abprci@yahoo.com

ADAM BERRY

EXPERIENCE

Mr. Berry specializes in a spectrum of radiological program responsibilities, including the supervision of radiological technicians at remediation work sites, management of radiation safety and remediation instrumentation laboratory, operation of a gamma spectroscopy laboratory, and radioactive materials shipping.

His radiological experience includes air sample and dosimetry database management; air sample compliance reporting; portable radiation measurement instrumentation calibration, maintenance and repair; continuous field surveying and sampling during large-scale earth moving remediation operations; job coverage and access control of remediation work in radioactive material areas; routine radiological surveys for clearance of materials; operation of a high-throughput on-site gamma spectroscopy laboratory.

In addition to Mr. Berry's experience, his formal training includes OSHA 40-Hour Safety Training, Current 8-Hour Refresher ;OSHA First Responder Operations, OSHA Excavation Safety, Ludlum Measurements Inc., 40-hour Instrumentation Training; Radioactive and Hazardous Waste Management and Transportation Training; Radworker Training current certification; ORTEC Gamma Spectroscopy, System Management, and Algorithms Training; Canberra ISOCS Advanced System Operation Training.

EMPLOYMENT

7/9/07 – 9/9/07: Cabrera Services Inc.
Radiation Safety Officer
Mr. Berry was contracted to provide radiological oversight/management during characterization and remediation of an aged army depot where uranium tailings and other hazardous materials were stored. Duties included conducting daily safety meetings, air sample database management, dosimetry tracking, sample log generation, daily heath and safety inspections. In addition, Mr. Berry lead a surgical excavation which generated only 600 yards of waste material from a five acre plot. This plot was free released based on a MARRSIM suvvey.

8/15/05 – 8/29/06: Professional Radiation Consulting, Incorporated
Senior Health Physics Technician / Radiation Safety Office/ / Lead Instrumentation Technician / Gamma Spectroscopy Technician

Mr. Berry was contracted to execute company and project specific radiological oversight, while maintaining various databases and programs. Mr. Berry's responsibilities included but were not limited to: instrumentation program management, generating company and site specific standard operating procedures, creation of radiological programs, and radiological materials license package support for clients. Mr. Berry's field duties include: Supervision of radiological technicians at remediation work sites, site characterization with sampling support, waste characterization via gamma spectroscopy to support shipping documentation and waste acceptance criteria, air sampling with database

maintance, field instrumentation repairs and calibrations, general health physics surveys and MARRSIM based release surveys.

1/22/03 – 7/31/05: URS Corporation, Hicksville, NY

Lead Excavation Technician/ Lead Instrumentation Technician/ Assistant Radiation Safety Officer/ Health Physics Technician.

GTEOSI Soil Remediation Project

Mr Berry was contracted to participate in initial project efforts by developing radiological operations procedures, implement instrumentation tracking, maintenance, repairs (down to surface component level) and to perform daily response checks. Upon project ramp-up added responsibilities included leading a radiological and geological excavation team to discover, define and sample various uranium and thorium contaminated soil and debris media for on/off site lab analysis while tracking all anomalies via a state plane laser positioning system and/or global positioning system, working with on/off site engineers to achieve excavation depths of 24'-40', escorting various state and government department officials within controlled areas, performing radiological surveys on persons, equipment and soils and performing job coverage.

10/10/02 – 11/20/02 US Ecology/Field Services, Oak Ridge, TN

Subproject Operations Manager/ Health Physics Technician

Manufacturing Sciences Corporation waste stream processed at US Ecology Recycle Center

Mr. Berry was contracted to actively oversee and participate in the sorting and segregation of 2.3 million pounds of waste from the MSC/BNFL decommissioning project. Daily activities included but were not limited to: daily instrument response checks, waste survey for restricted release, daily written surveys for all process areas and container storage areas, waste packaging for disposal, decontamination and release of various designed waste containers, incoming and release surveys, incoming/outgoing waste tracking, on-site procurement, process and waste cost tracking, Assisted in the implementation of the Bulk Survey For Release (BSFR) program which reduced unprocessed waste volume designated for Envirocare to less than 5% of the total waste stream.

8/27/02 – 10/9/02: US Ecology/Field Services, Oak Ridge, TN

Decommissioning Team Lead/ Health Physics Technician

Manufacturing Sciences Corporation/BNFL

Mr. Berry was contracted to actively lead a decontamination team to meet stringent contractual deadlines for final survey and license termination of a metal recycle center. Scope of work included the removal, by pneumatic equipment, of various building media (concrete, epoxy and various other high temperature/endurance finishes.

7/18/02 – 8/26/02 US Ecology/Field Services Festus, MO

Project Site Manager/ Health Physics Technician

Westinghouse/Hematite Nuclear Fuel Fabrication Facility

Mr. Berry was contracted to actively manage and participate in the sorting and segregation of a DAW waste stream and conduct a characterization of soil from an aged nuclear fuel fabrication facility. Waste stream contained enriched uranium and TCLP metals. Daily operations consisted of performing waste surveys for process segregation, collecting daily smear samples around and in work/process area, assisting with incoming and release surveys, collected, packaged and delivered all analytical samples to various labs, tracking and controlling project finances/costs, on site procurement, change order negotiations, document control and the implementation of the Bulk Survey For Release (BSFR) program which allows for decreased disposal costs and increased disposal options.

1/9/02 – 7/6/02 US Ecology/Field Services Webster, TX

Assistant Project Manager/Decontamination Technician

Gulf Nuclear Incorporated D&D – EPA Superfund

Mr. Berry was contracted to assist in the broad spectrum of responsibilities involved with the emergency response remediation of a dilapidated source manufacturing facility. Daily activities included but were not limited to: on/off site procurement, project finance/cost tracking, weekly invoice generation and submittal for approval, count room assistant, instrumentation response checks, dosimetry tracking (both whole body and appendage), daily written boundary surveys, daily large area and standard smear collection with field and lab analyzation, collected and packaged all analytical samples for shipment, document control, client relations, large component decontamination and source packaging for both transportation and disposal.

12/5/00 – 1/4/02 Natural Data Knoxville, TN

Eastern Regional Manager

Mr. Berry was promoted and transferred to the Knoxville, Tn location to penetrate the Eastern region market. Startup process consisted of staff selection/training, implementation of information technology systems and the creation of contract employee logs in accordance with federal and state regulation. Day to day operations consisted of maintaining client/vendor relationships through personal selling techniques, presentation solicitation and various after-hours and weekend activities spawned for the purpose of building strong business relationships. Competitive bidding and proposal production was required for authorized business to occur as a sub-contractor to various radiological industry clients including the Department of Energy. Contract negotiations occurred often to define/gather work scopes, deadlines and purchase orders. Areas of staff augmentation included but were not limited to: environmental engineering, radiological and/or chemical decommissioning and electro-mechanical engineering.

4/5/00 – 11/15/01 Natural Data Phoenix, AZ

Head Recruiter

Co-founder and recruiter for the Engineering Services Group (ESG). Daily routine consisted of verifying client needs, prospecting various candidate pools, interviewing qualified candidates, both on phone and on a face to face basis, conducting criminal/credit background surveillance and submitting all state and federal documentation in accordance to mandated hiring practices. Other activities included recruiter/management training, scheduling client meetings with ESG sales staff and employee timecard verification and submittal for payrolling services.

EDUCATION

1995 – 2000 Arizona State University Tempe, AZ

Bachelor of Interdisciplinary Studies

- Degree of focus was based on business and psychology studies with minor and audited emphasis in mechanical engineering

QUALIFICATIONS

- Ortec Gamma Spectroscopy Theory and Operation (24 hours)
- Canberra ISOCS Advanced System Operation (40 hours)
- Ludlum Instrument Calibration and Repairs (24 hours)
- DOT Hazardous Materials Shipment Training (40 hours)
- Trimble/Arc Second Laser Positioning System Operation (16 hours)
- Multi-Rae 3/5 gas environ monitoring systems (3 hours)
- RADēCO Air Sampler Theory, Calibration and Repairs (8 hours)

- OSHA HAZWOPER certified (40 hours with current 8 hour refresher)
- OSHA Excavation Training for Competent Persons (4 hours)
- OSHA First Responder Operations (8 hours)
- DOT Hazardous Material Shipment Training/General Worker (4 hours)
- AHA First Aid/CPR Provider with Heartsaver AED (8 hours)
- MS Office Suite

U.S. ARMY CORPS OF ENGINEERS

PROFESSIONAL DEVELOPMENT SUPPORT CENTER
HUNTSVILLE, ALABAMA

CERTIFICATE

This is to certify that

ADAM BERRY

has completed the Corps of Engineers Training Course

CONSTRUCTION QUALITY MANAGEMENT FOR CONTRACTORS

Given at TACOMA, WA (Location) By SEATTLE (Instructional District) April 9, 2009 (Date)

Facilitator

THIS CERTIFICATE EXPIRES FIVE YEARS FROM DATE OF ISSUE

Chief, USACE Professional Development Support Center

APPENDIX B

CONTRACTOR QUALITY CONTROL FORMS

This page intentionally left blank.

TETRA TECH EC, INC.		Date:
CONTRACTOR PRODUCTION REPORT		

Contract No.	Title & Location:	Report No.
N62473-10-D-0809		

Contractor:	Superintendent:
AM Weather:	PM Weather:

Work Performed Today

Work Location & Description	Employer	Number	Trade	Hours

Was a job safety meeting held this date?	Yes:		Total work hours on site this date:	0.0
(If yes, attach a copy of meeting minutes.)	No:			
Were there any lost time accidents this date?	Yes:			
(If yes, attach a copy of completed OSHA report.)	No:		Cumulative work hours from previous report:	
Was trenching/scaffolding/HV electrical/high work done this date?	Yes:			
(If yes, attach statement or checklist showing inspection performed.)	No:			
Was hazardous material/waste released to the environment?	Yes:		Cumulative work hours since start of work:	
(If yes, attach description of incident and proposed action.)	No:			

List safety actions taken today/safety inspections conducted:

Remarks:

Contractor Superintendent _____ Date _____

1 Contractor Production Report.xls

CONTRACTOR PRODUCTION REPORT

Date:	
Contract No. N62473-10-D-0809	Title & Location:
Report No. 0	

Rental Equipment	Vendor	PO/MOA#	Charge #	Start Date	Rate	Daily Hrs	P.O.P. Expires

Materials	Vendor	PO #	Charge #	QTY REC'D	ACCUM QTY	P O QTY	P.O.P. Expires

Contractor Superintendent _____ Date _____

TETRA TECH EC, INC.
NAVY RADIOLOGICAL ENVIRONMENTAL MULTIPLE AWARD CONTRACT (Rad EMAC)
CONTRACT NO. N62473-10-D-0809

DEFICIENCY NOTICE

TASK ORDER # _____ DN # _____ DATE _____

LOCATION: _____ ROICC / RPM

1. Plan, Procedure, Specification, or Drawing (Clearly state the requirement)

2. Description of Deficiency

QC verification of corrective action required: **Yes** _____ **No** _____

Prepared by: _____ **Approved by:** _____

3. Corrective Action

_____ _____ _____

Organization Signature Date

4.

Corrective action verified by: _____ Date _____

Comments:

_____ _____

Program Quality Control Manager Date

TETRA TECH EC, INC.

NAVY RADIOLOGICAL ENVIRONMENTAL MULTIPLE AWARD CONTRACT (Rad EMAC)

CONTRACT NO. N62473-10-D-0809

DESIGN CHANGE NOTICE (DCN)

TASK ORDER # _____ DCN # _____ DATE _____

LOCATION _____ NTR / RPM _____

1. Document to be changed. Identify revision, date, section, drawing, etc.

2. Description of Change (Items involved, submit sketch, if applicable): (Use continuation sheet if necessary)

Engineering "HOLD" placed on all activities in area defined herein pending receipt of formally revised document(s) and / or DCN.
Released for construction basis of modifications prescribed by this DCN.

3. Reason for Change (Attach additional information if needed)

4. Originator (Print name and sign)		Title	Date
Reviewed by: (Print name and sign)		Title	Date
Task Order Manager (Print name and sign)	Date	Program Quality Manager (Print name and sign)	Date
NTR Acknowledgement (Print name and sign)	Date	RPM Approval (Print name and sign)	Date

TETRA TECH EC, INC.
NAVY RADIOLOGICAL ENVIRONMENTAL MULTIPLE AWARD CONTRACT (Rad EMAC)
CONTRACT NO. N62473-10-D-0809

DESIGN CLARIFICATION REQUEST

TASK ORDER # _____ DC# _____ DATE _____

Submitted to: _____

1. Document reference. Identify revision, date, section, drawing, etc.

2. Clearly state requirement or describe drawing as shown. (Attach additional info if needed)

3. Information requested or proposed change. (Attach additional information if needed)

4. Response

Does response require an FCR or DCN YES ☐ NO ☐

FCR ☐ DCN ☐

Task Order Manager (Print name and sign)	Date

TETRA TECH EC, INC.
NAVY RADIOLOGICAL ENVIRONMENTAL MULITPLE AWARD ACTION CONTRACT (Rad EMAC)
CONTRACT NO. N62473-10-D-0809

FIELD CHANGE REQUEST (FCR)

TASK ORDER # _____ FCR # _____ DATE _____

LOCATION: _____ NTR / RPM _____

1. Document to be changed. Identify revision, date, section, drawing, etc.

2. Description of existing requirement and proposed change (Attach sheet if necessary)

3. Reason for Change (Attach sheet if necessary)

4. Originator: (print name and sign)		**Title**	**Date**
Reviewed by: (print name and sign)		**Title**	**Date**
Site Superintendent (Print name and sign)	**Date**	**Task Order Manager (Print name and sign)**	**Date**
TtEC Program QC Manager (Print Name and Sign)	**Date**	**NTR Acknowledgement (Print name and sign)**	**Date**

TETRA TECH EC, INC.
NAVY RADIOLOGICAL ENVIRONMENTAL MULTIPLE AWARD CONTRACT (Rad EMAC)
CONTRACT NO. N62473-10-D-0809

Initial Phase Inspection Checklist

Task Order No.: _____ Date: _____
Definable Feature: _____ Spec Section: _____

I. Personnel Present:

	Name	Position	Company / Government
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

(List additional personnel on reverse side)

II Identify full compliance with procedures identified at preparatory inspection. Coordinate plans, specifications, and submittals.
Comments:

III Preliminary Work. Ensure preliminary work is complete and correct. If not, what action is taken?
Actions:

IV Establish Levels of Workmanship

1. Where is the work located? _____
2. Is a sample panel required? Yes _____ No _____
3. Will the initial wok be considered as a sample? Yes _____ No _____
   (If yes, maintain in present condition as long as possible.)

V Resolve any differences.
Comments:

VI Check Safety

1. Review job conditions using Site Health and Safety Plan and job hazard analysis.
2. Review job conditions using using EM-385-1-B151.

Initial Phase Inspection Checklist

Comments:

_____
Site CQC Representative

TETRA TECH EC, INC.
NAVY RADIOLOGICAL ENVIRONMENTAL MULTIPLE AWARD CONTRACT (Rad EMAC)
CONTRACT NO. N62473-10-D-0809

MONTHLY REWORK ITEMS LIST

Task Order Number: _____ Project: _____ Date: _____

Number	Identification of item requiring rework	Date Identified	Date Corrected	Remarks

_____
Site CQC Representative Date

TETRA TECH EC, INC.
NAVY RADIOLOGICAL ENVIRONMENTAL MULTIPLE AWARD CONTRACT (Rad EMAC)
CONTRACT NO. N62473-10-D-0809

NONCONFORMANCE REPORT

TASK ORDER # _____ NCR# _____ DATE _____

LOCATION: _____ ROICC/RPM

1. Plan, Procedure, Specification, or Drawing (Clearly state the requirement)

2. Description of Nonconforming Item or Condition

Did nonconforming condition require suspension of work activities Yes ☐ No ☐

If yes, explain requirement to restart work activities: _____

_____ _____ _____

Prepared by: Title Date

3. Corrective Action

- ☐ use-as-is
- ☐ repair
- ☐ rework to specificaion
- ☐ other - specify: _____

Comments:

_____ _____ _____

Organization Signature Date

NONCONFORMANCE REPORT

4. Evaluation of Proposed Disposition

Evaluator _____ Title _____

Accept	
Accept with comments	
Reject	
Reject with comments	

Comments:

Signature _____ Date _____

Evaluator _____ Title _____

Accept	
Accept with comments	
Reject	
Reject with comments	

Comments:

Signature _____ Date _____

5. Verification

Verification required Yes ☐ No ☐

Verified by: _____ _____ _____
Signature Title Date

Approved by: _____ _____
Program QC Manager Date

TETRA TECH EC, INC.
NAVY RADIOLOGICAL ENVIRONMENTAL MULTIPLE AWARD CONTRACT (Rad EMAC)
CONTRACT NO. N62473-10-D-0809

Preparatory Inspection Checklist

Task Order No.: _____ Date: _____
Definable Feature: _____ Spec Section: _____
NAVFAC SW notification _____ 48 Hours in Advance Yes ____ No ____

I Submittals

1. Review submittals and/or submittal register. Have all applicable submittals been approved?
Yes _____ No _____

If No, what items have not been submitted?
Comments

2. Are all materials on hand? Yes _____ No _____

If No, what items are missing?
Comments

3. Check approved submittals against delivered materials. (This should be done as materials arrive.)
Comments

II Material Storage

Are materials stored properly? Yes _____ No _____

If No, what actions is taken?

III Specifications

1. Review each paragraph of Specification

Preparatory Inspection Checklist

2. Discuss procedure for accomplishing the work.

3. Clarify any differences.

IV Preliminary Work and Permits

Ensure preliminary work is correct and permits are on file. Yes_____ No_____

If No, what action is taken?

V Testing

1. Identify test to be performed, frequency, and by whom.

2. When required?

3. Where required?

4. Review testing play.

5. Has test facilities been approved?

Preparatory Inspection Checklist

VI Safety

1. Review applicable portion of the Task Order Site Health and Safety Plan.
2. Review applicable portion of EM385-1-1.

Comments

3. Activity Hazard Analysis approved? Yes _____ No _____

VIII Navy comments during meeting.

TETRA TECH EC, INC.
NAVY RADIOLOGICAL ENVIRONMENTAL MULTIPLE AWARD CONTRACT (Rad EMAC)
CONTRACT NO. N62473-10-D-0809

Preparatory Inspection Checklist

I. Personnel Present:

	Name	Position	Company / Government
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

(List additional personnel on reverse side)

_____
Site CQC Representative

TETRA TECH EC, INC	REPORT NO:	
NAVFAC SW RADIOLOGICAL EMAC CONTRACT NO. N62473-10-D-0809 SAN DIEGO, CA	PROJECT:	
	PROJECT NO:	
	SUBCONTRACTOR:	
	LOWER TIER SUB:	
CONTRACTOR QUALITY CONTROL REPORT	DATE:	
	TASK:	
	LOCATION	

SEE CONTRACTOR DAILY PRODUCTION SUMMARY REPORT FOR INFORMATION ON SAFETY, WEATHER, SUBCONTRACTOR HOURS AND AREAS OF RESPONSIBILITY:

SUMMARY OF CONSTRUCTION PROGRESS AND QUALITY CONTROL ACTIVITIES PERFORMED:

Tests Performed and Results:

Materials Received:

Deficiencies Noted with Proposed or Implemented Corrective Action:

JOB SAFETY: (LIST OBSERVATIONS)

COMMENTS: ADDRESS ANY CHANGES (FCR/DCN), MEETING RESULTS OR OTHER INFORMATION

Contractor's Verification: On behalf of the Contractor, I certify this report is complete and correct, and all materials and equipment used and work performed during this reporting period are in compliance with the contract plans and specifications to the best of my knowledge, except as may be noted above.

NAME:	TITLE/COMPANY: PQCM
SIGNATURE:	DATE:

	SUBMITTAL REGISTER														
Contract Number: N62473-10-D-0809	Task Order: 0007 Project Title: Parcel E, 500 Series Area, Radiological Remediaton and Support					Location: Hunters Point Shipyard San Francisco, California							Contractor: Tetra Tech EC, Incorporated		
							Contractor Action			Approving Authority Action				Contracting Officer / Contractor	
Specification Section Number	SD No and Type of Submittal Material or Product	Specification Paragraph Number	Classification/ Approval By CO*	Govt or A/E Reviewer	Transmittal Control No.	Planned Submittal Date	Action Code	Date of Action	Date FWD to Approving Authority Date recd from Contractor	Date FWD to other Reviewer	Date Received from other Reviewer	Action Code	Date of Action	Mailed to Contractor/ Received from Approving Authority	Remarks
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
1 Base Contract	As-Built Records	5.13.4		NAVY		Upon completion of work									
2 Base Contract	Combined Contractor Production Report / Contractor Quality Control Report	5.13.1/5.13.2		ROICC		10 a.m. next working day									
3 Base Contract	Testing Plan and Log	5.4		ROICC		Last working day of month									
4 Base Contract	Monthly Summary Report of Field Tests	5.4		ROICC		Last working day of month									
5 Base Contract	Weekly QC Meeting Minutes	6.4.4		NAVY		Two working days after each meeting									
6 Base Contract	Rework Items List	5.13.3		ROICC		With Weekly QC meeting minutes									
7 Base Contract	Contractor Quality Control Report Certification	5.12.1		ROICC		Daily - Included on Daily CQC Report									
8 Base Contract	Invoice Certification	5.12.2		NAVY		End of month concurrent with Invoice									
9 Base Contract	Completion Certification	5.12.3		NAVY		Project Completion									
10 Task Order Contract	Monthly Progress Reports and Sched Updates	SOW 2.1.5		NAVY		Concurrent with Invoice by 10th calendar day of following month									
11 Task Order Contract	Weekly Conference Call Agenda and Minutes	SOW 2.1.5		NAVY		1 working day prior to weekly call									
12 Task Order Contract	Kick Off Meeting Minutes	SOW 2.1.1		NAVY		10 days after meeting									
13 Task Order Contract	Community Meeting Presentations	SOW 2.1.3		NAVY		1 week prior to meeting									
14 Task Order Contract	Contractor Coordination Meeting	SOW 2.1.4		NAVY											
15 Task Order Contract	Daily Field Report	SOW 2.1.4		NAVY		2 working days following field activities									
16 Task Order Contract	Execution Plan - Internal Draft Draft Final	SOW 2.2.3		NAVY		45 days after kickoff meeting 30 days after comments 45 days after draft									Includes SAP, EPP, DCP, RPP, QA/QC Plan,and TCP

SUBMITTAL REGISTER

Contract Number: N62473-10-D-0809
Task Order: 0007
Project Title: Parcel E, 500 Series Area, Radiological Remediaton and Support
Location: Hunters Point Shipyard, San Francisco, California
Contractor: Tetra Tech EC, Incorporated

								Contractor Action			Approving Authority Action				Contracting Officer / Contractor	
	Specification Section Number	SD No and Type of Submittal Material or Product	Specification Paragraph Number	Classification/ Approval By CO*	Govt. or A/E Reviewer	Transmittal Control No.	Planned Submittal Date	Action Code	Date of Action	Date FWD to Approving Authority Date recd from Contractor	Date FWD to other Reviewer	Date Received from other Reviewer	Action Code	Date of Action	Mailed to Contractor/ Received from Approving Authroity	Remarks
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
17	Task Order Contract	APP/SSHP - Internal Draft Final	SOW 2.2.3.1		NAVY		45 days after kickoff meeting 30 days after comments									Contractor Asbestos Abatement Plan to be submitted to ROICC for review and acceptance.
18	Task Order Contract	Design Plan - Draft Final	SOW 2.2.4		NAVY		90 days after kickoff meeting 45 days after draft									
19	Task Order Contract	TSP - Bld 500 - Draft Final	SOW 2.2.5		NAVY		60 days prior to scheduled survey start date 30 days after draft									
20	Task Order Contract	TSP - Bld 521 Site (Power Plant) - Draft Final	SOW 2.2.5		NAVY		60 days prior to scheduled survey start date 30 days after draft									
21	Task Order Contract	TSP - Bld 520 Site - Draft Final	SOW 2.2.5		NAVY		60 days prior to scheduled survey start date 30 days after draft									
22	Task Order Contract	TSP - Bld 500 Series Site - Draft	SOW 2.2.5		NAVY		60 days prior to scheduled survey start date 30 days after draft									
23	Task Order Contract	TSP - Bld 508 Site - Draft Final	SOW 2.2.5		NAVY		60 days prior to scheduled survey start date 30 days after draft									
24	Task Order Contract	TSP - Bld 506 Site - Draft Final	SOW 2.2.5		NAVY		60 days prior to scheduled survey start date 30 days after draft									
25	Task Order Contract	TSP - Bld 517 Site - Draft Final	SOW 2.2.5		NAVY		60 days prior to scheduled survey start date 30 days after draft									

Contract Number: N62473-10-D-0809	SUBMITTAL REGISTER Task Order: 0007 Project Title: Parcel E, 500 Series Area, Radiological Remediaton and Support						Location: Hunters Point Shipyard San Francisco, California							Contractor: Tetra Tech EC, Incorporated		
							Contractor Action			Approving Authority Action				Contracting Officer / Contractor		
	Specification Section Number	SD No and Type of Submittal Material or Product	Specification Paragraph Number	Classification/ Approval By CO*	Govt. or A/E Reviewer	Transmittal Control No.	Planned Submittal Date	Action Code	Date of Action	Date FWD to Approving Authority Date recd. from Contractor	Date FWD to other Reviewer	Date Received from other Reviewer	Action Code	Date of Action	Mailed to Contractor/ Received from Approving Authroity	Remarks
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
26	Task Order Contract	TSP - Bld 510A Site - Draft Final	SOW 2.2.5		NAVY		60 days prior to scheduled survey start date 30 days after draft									
27	Task Order Contract	TSP - Bld 507 Site - Draft Final	SOW 2.2.5		NAVY		60 days prior to scheduled survey start date 30 days after draft									
28	Task Order Contract	TSP - Bld 529 Site (Vault) - Draft Final	SOW 2.2.5		NAVY		60 days prior to scheduled survey start date 30 days after draft									
29	Task Order Contract	TSP - Bld 509 Site - Draft Final	SOW 2.2.5		NAVY		60 days prior to scheduled survey start date 30 days after draft									
30	Task Order Contract	TSP - Bld 510 Site - Draft Final	SOW 2.2.5		NAVY		60 days prior to scheduled survey start date 30 days after draft									
31	Task Order Contract	TSP - Bld 503 Site - Draft Final	SOW 2.2.5		NAVY		60 days prior to scheduled survey start date 30 days after draft									
32	Task Order Contract	SU #1 SUPR Internal Draft Draft Final	SOW 2.4.2.1		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
33	Task Order Contract	SU #2 SUPR Internal Draft Draft Final	SOW 2.4.2.1		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
34	Task Order Contract	SU #3 SUPR Internal Draft Draft Final	SOW 2.4.2.1		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									

	SUBMITTAL REGISTER															
Contract Number: N62473-10-D-0809	Task Order: 0007 Project Title: Parcel E, 500 Series Area, Radiological Remediaton and Support						Location: Hunters Point Shipyard San Francisco, California							Contractor: Tetra Tech EC, Incorporated		
							Contractor Action			Approving Authority Action				Contracting Officer / Contractor		
	Specification Section Number	SD No and Type of Submittal Material or Product	Specification Paragraph Number	Classification/ Approval By CO*	Govt. or A/E Reviewer	Transmittal Control No.	Planned Submittal Date	Action Code	Date of Action	Date FWD to Approving Authority Date recd. from Contractor	Date FWD to other Reviewer	Date Received from other Reviewer	Action Code	Date of Action	Mailed to Contractor/ Received from Approving Authroity	Remarks
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
35	Task Order Contract	SU #4 SUPR Internal Draft Draft Final	SOW 2.4.2.1		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
36	Task Order Contract	SU #5 SUPR Internal Draft Draft Final	SOW 2.4.2.1		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
37	Task Order Contract	SU #6 SUPR Internal Draft Draft Final	SOW 2.4.2.1		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
38	Task Order Contract	SU #7 SUPR Internal Draft Draft Final	SOW 2.4.2.1		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
39	Task Order Contract	SU #8 SUPR Internal Draft Draft Final	SOW 2.4.2.1		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
40	Task Order Contract	FSS - Bld 500 - Internal Draft Draft Final	SOW 2.4.2.2		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
41	Task Order Contract	FSS -Bld 520 Site - Internal Draft Draft Final	SOW 2.4.2.2		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
42	Task Order Contract	FSS - Bld 521 Site - Internal Draft Draft Final	SOW 2.4.2.2		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									

	SUBMITTAL REGISTER															
	Contract Number: N62473-10-D-0809	Task Order: 0007 Project Title: Parcel E, 500 Series Area, Radiological Remediaton and Support					Location: Hunters Point Shipyard San Francisco, California					Contractor: Tetra Tech EC, Incorporated				
							Contractor Action			Approving Authority Action				Contracting Officer / Contractor		
	Specification Section Number	SD No and Type of Submittal Material or Product	Specification Paragraph Number	Classification/ Approval By CO*	Govt. or A/E Reviewer	Transmittal Control No.	Planned Submittal Date	Action Code	Date of Action	Date FWD to Approving Authority Date recd. from Contractor	Date FWD to other Reviewer	Date Received from other Reviewer	Action Code	Date of Action	Mailed to Contractor/ Received from Approving Authority	Remarks
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
43	Task Order Contract	FSS - Bld 508 Site - Internal Draft Draft Final	SOW 2.4.2.2		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
44	Task Order Contract	FSS - Bld 517 Site - Internal Draft Draft Final	SOW 2.4.2.2		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
45	Task Order Contract	FSS - Bld 506 Site - Internal Draft Draft Final	SOW 2.4.2.2		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
46	Task Order Contract	FSS - Bld 510A Site- Internal Draft Draft Final	SOW 2.4.2.2		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
47	Task Order Contract	FSS - Bld 507 Site- Internal Draft Draft Final	SOW 2.4.2.2		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
48	Task Order Contract	FSS - 500 Series Bld Site- Internal Draft Draft Final	SOW 2.4.2.2		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
49	Task Order Contract	FSS - Bld 529 Site- Internal Draft Draft Final	SOW 2.4.2.2		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
50	Task Order Contract	FSS - Bld 509 Site- Internal Draft Draft Final	SOW 2.4.2.2		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									

	SUBMITTAL REGISTER															
Contract Number: N62473-10-D-0809	Task Order: 0007 Project Title: Parcel E, 500 Series Area, Radiological Remediaton and Support						Location: Hunters Point Shipyard San Francisco, California						Contractor: Tetra Tech EC, Incorporated			
							Contractor Action			Approving Authority Action				Contracting Officer / Contractor	
	Specification Section Number	SD No and Type of Submittal Material or Product	Specification Paragraph Number	Classification/ Approval By CO*	Govt. or A/E Reviewer	Transmittal Control No.	Planned Submittal Date	Action Code	Date of Action	Date FWD to Approving Authority Date recd. from Contractor	Date FWD to other Reviewer	Date Received from other Reviewer	Action Code	Date of Action	Mailed to Contractor/ Received from Approving Authority	Remarks
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
51	Task Order Contract	FSS - Bld 510 Site- Internal Draft Draft Final	SOW 2.4.2.2		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
52	Task Order Contract	FSS - Bld 503 Site- Internal Draft Draft Final	SOW 2.4.2.2		NAVY		30 days after approval of SU FSS 45 days after Internal draft 45 days after BCT comments									
53	Task Order Contract	RACR Internal Draft Draft Final	SOW 2.4.2.3		NAVY		45 days after complete SUPRs 45 days after Internal draft 45 days after BCT comments									
54																

TETRA TECH EC, INC.

NAVY RADIOLOGICAL ENVIRONMENTAL MULTIPLE AWARD CONTRACT (Rad EMAC)

CONTRACT NO. N62473-10-D-0809

TEST PLAN and LOG

Task Order Number: CTO 0007 Task Order Manager: B. Dougherty

Project Parcel E 500 Series Area Radiological Remediation and Support Location: Hunters Point Shipyard

Spec. Section	Paragraph No.	Test Procedure	Test Name	Test Frequency	Test Responsibility	Tested By	Date Completed	Remarks

NONCONFORMANCE REPORT LOG

Task Order Number: _____

Task Order Name: _____

NCR #	DESCRIPTION OF CONDITIONS / ITEMS AFFECTED	DATE				REMARKS
		ISSUE	DISPOSITION / APPROVAL	RE-INSPECTION	CLOSURE	

FCR / DCN LOG

Task Order Number: _____

Task Order Name: _____

FCR# / DCN#	DESCRIPTION OF CHANGE	Date Initiated	Status

ATTACHMENT 2

FINAL

RADIATION PROTECTION PLAN
April 26, 2010

DCN: EMAC-8823-0003-0010
(on CD only)

This page intentionally left blank.

TETRA TECH EC, INC.

NAVY RADIOLOGICAL ENVIRONMENTAL MULTIPLE AWARD CONTRACT (Rad EMAC)

CONTRACT NO. N62473-10-D-0809

TEST PLAN and LOG

Task Order Number: CTO 0007 Task Order Manager: B. Dougherty

Project Parcel E 500 Series Area Radiological Remediation and Support Location: Hunters Point Shipyard

Spec. Section	Paragraph No.	Test Procedure	Test Name	Test Frequency	Test Responsibility	Tested By	Date Completed	Remarks

NONCONFORMANCE REPORT LOG

Task Order Number: _____

Task Order Name: _____

NCR #	DESCRIPTION OF CONDITIONS / ITEMS AFFECTED	DATE				REMARKS
		ISSUE	DISPOSITION / APPROVAL	RE-INSPECTION	CLOSURE	

FCR / DCN LOG

Task Order Number: _____

Task Order Name: _____

FCR# / DCN#	DESCRIPTION OF CHANGE	Date Initiated	Status

ATTACHMENT 3

FINAL

BASEWIDE DUST CONTROL PLAN, REVISION 1
November 29, 2010

DCN: ECSD-3211-0018-0002.R1
(on CD only)

This page intentionally left blank.

ATTACHMENT 4

FINAL

STORMWATER POLLUTION PREVENTION PLAN
November 19, 2010

DCN: RMAC-0809-0002-0007
(on CD only)

This page intentionally left blank.